10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

Synaptotagmin-10 Antibody - Product Information

Application	**WB, IHC, ICC**
Primary Accession	Q9R0N4
Other Accession	NP_061273.1
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

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	**-20ºC**

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

Shipping Temperature	**Blue Ice or 4ºC**

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

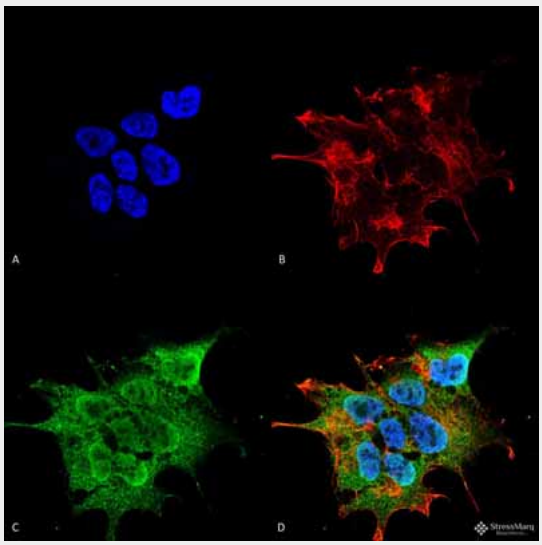
Synaptotagmin-10 Antibody - Protocols

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

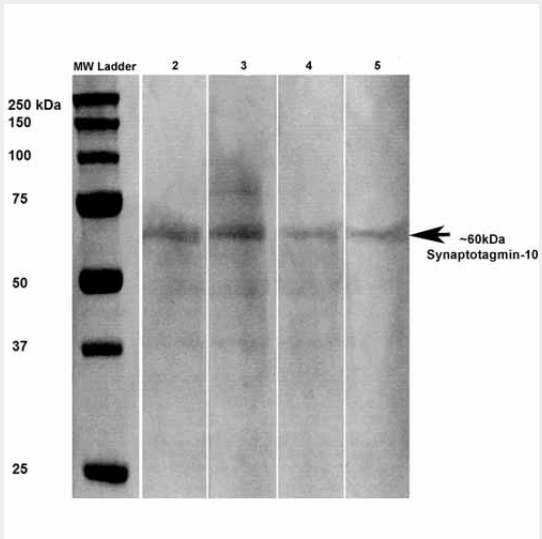
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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.

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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 neurexins, 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.