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Syntaxin Antibody
Syntaxin Antibody, Clone SP-6
Catalog # ASM10124

Specification

Syntaxin Antibody - Product Information

Application	**IHC, WB**
Primary Accession	Q16623
Other Accession	NP_004594.1
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Human Syntaxin Monoclonal IgG1

Target/Specificity
Detects ~38kDa.

Other Names
HPC1 Antibody, P35 1 Antibody, STX1 Antibody, STX1A Antibody, STX1B Antibody, STX2 Antibody, STX3 Antibody

Immunogen
Raised against synaptic vesicle-containing fractions of immunoprecipitated human brain homogenate

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-181 was sufficient for detection of Syntaxin in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasmic Vesicle | Secretory Vesicle | Synaptic Vesicle Membrane | Cell Junction | Synapse | Cell Membrane

Syntaxin Antibody - Protocols

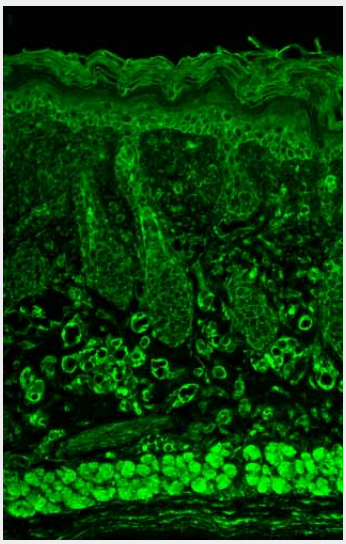
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

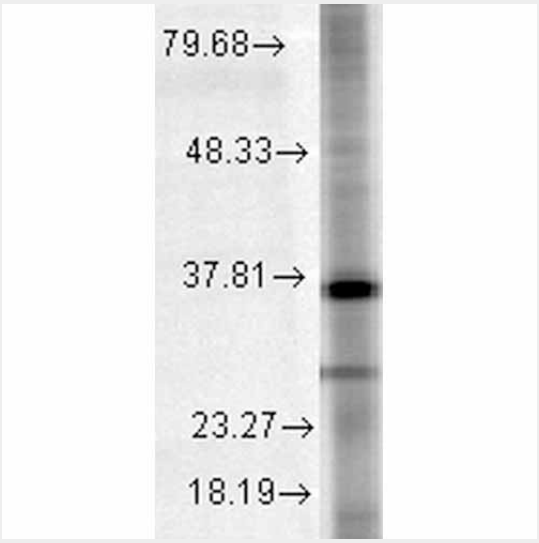
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- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Syntaxin Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Syntaxin Monoclonal Antibody, Clone SP-6 (ASM10124). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Syntaxin Monoclonal Antibody (ASM10124) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Muscle positive, basal layer staining in the epidermis and positive staining in the hair follicles.



Western Blot analysis of Rat tissue lysate showing detection of Syntaxin protein using Mouse Anti-Syntaxin Monoclonal Antibody, Clone SP-6 (ASM10124). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Syntaxin Monoclonal Antibody (ASM10124) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

Syntaxin Antibody - Background

Syntax ins are a family of membrane integrated Q-SNARE proteins participating in exocytosis (1). They possess a single C-terminal transmembrane domain, a SNARE domain, and an N-terminal regulatory domain. This SNARE domain binds to synaptobrevin and SNAP-25 to form the SNARE complex (2, 3).
Support of syntaxin's involvement in vesicular transport and neurotransmission includes the requirement of its yeast homologs, SSO 1 and 2, in targeting and fusion of Golgi-derived vesicles with the plasma membrane (4). Syntaxin also provides the target pf clostridial neurotoxin C1, which blocks neurotransmitter release (5). The formation of 20S complex involves the interaction of VAMP with syntaxin through an ATP-dependent reaction modulated by synaptotagmin, SNAP-25, a-SNAP and NSF (6).

Syntaxin Antibody - References

1. Bennett M.K., et al. (1993) Cell. 74(5): 863-873.
2. Walter A.M., Wiederhold K., Bruns D., Fasshaurer D. and Sorensen J.B. (2010) J Cell BIol. 188(3): 401-413.
3. Honma S., Taki K., Lei S., and Wakisaka S. (2010) Anat Rec. Epub.
4. Aalto M.K., Ronne H. and Keranen S. (1993) EMBO J. 12: 4095-4104.
5. Blasi J., et al. (1993) EMBO J. 12: 4821-4828.
6. Sollner T., et al. (1993) Cell. 75: 409-418.