

Syntaxin Monoclonal Antibody (SP6)

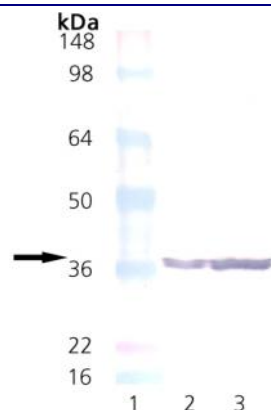
Product Specifications	
Catalog Number:	VAM-SV013
Source:	Mouse
Isotype:	IgG ₁
Species Reactivity:	Rat & Mouse Other species not tested.
Applications:	WB ^{1,6} : 1:1000 (Colorimetric) Other applications not tested. <i>The optimal dilution for a specific application must be determined by the investigator</i>
Predicted M.W.:	~38 kDa
Concentration:	See product label
Purification:	Protein G Affinity
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol
Storage:	Store at -20°C <i>Shipping conditions may differ from the recommended storage temperature</i>
Immunogen:	Synaptic vesicle-containing fractions immunoprecipitated from human brain homogenates using anti-human synaptophysin monoclonal antibodies ¹ .
Related Products:	<p>LYT-MB100 Mouse Brain Tissue Extract</p> <p>LYT-RB100 Rat Brain Tissue Extract</p> <p>SAB-101 Goat anti-Mouse IgG Polyclonal Antibody, AP Conjugate</p> <p>VAM-SV025 Syntaxin 6 Monoclonal Antibody (3D10)</p> <p>VAM-SV026 Syntaxin 13 Monoclonal Antibody (15G2)</p> <p>VAP-SV064 Syntaxin 1A Polyclonal Antibody</p> <p>VAP-SV065 Syntaxin 2 Polyclonal Antibody</p>

Background:

Syntaxin, a 35 kDa type II integral membrane protein localized to the plasma membrane at nerve terminals², came to light through its association with synaptotagmin and N-type calcium channel, a subtype of calcium channel on the plasma membrane important for neurotransmitter release. Identified homologs of syntaxin in various eukaryotes range from yeast to human^{1,2}. Support for 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 membrane³. Syntaxin also provides the target of clostridial neurotoxin C1, which blocks neurotransmitter release⁴. 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 NSF⁵.

References:

- Honer, W.G., Hu, L. and Davies, P. (1993) Brain Res. **609**, 9-20.
- Calakos, N. and Scheller, R. (1996) Physiol Rev. **76**, 1-29.
- Aalto, M.K., Ronne, H. and Keranen, S. (1993) EMBO J. **12**, 4095-4104.
- Blasi, J., et al. (1993) EMBO J **12**, 4821-4828.
- Sollner, T., et al. (1993) Cell **75**, 409-418.
- Honer, W.G., et al. (1997) Neurosci. **1**, 99-110.



Western Blot Analysis: Lane 1: MWM, Lane 2: 20 µg Mouse Brain Tissue Extract (LYT-MB100), Lane 3: 14 µg Rat Brain Tissue Extract (LYT-RB100) probed with Syntaxin Monoclonal Antibody (SP6) at 1µg/mL.

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