

# Syntaxin 5 (m2): 293T Lysate: sc-123881

## BACKGROUND

Syntaxins bind to various proteins that mediate exocytosis, including VAMPs (vesicle-associated membrane proteins), NSF (N-ethylmaleimide-sensitive factor), SNAP 25 (synaptosomal-associated protein of 25 kDa), SNAPs (soluble NSF attachment proteins) and synaptotagmin. The gene encoding Syntaxin 5 maps to chromosome 11q12.2. Syntaxin 5 binds to synaptobrevin/VAMP *in vitro*. The short transmembrane domain of Syntaxin 5 directs this protein for *cis*-Golgi localization. Syntaxin 5 associates with p97 to regulate the assembly of transitional ER. Dephosphorylation of p97 stabilizes the p97/Syntaxin 5 complex. Syntaxin 5 also exists in a SNARE complex containing Golgi SNARE (GS) 28, GS15 and Ykt6.

## REFERENCES

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2. Ravichandran, V. and Roche, P.A. 1997. Cloning and identification of human Syntaxin 5 as a synaptobrevin/VAMP binding protein. *J. Mol. Neurosci.* 8: 159-161.
3. Roy, L., Bergeron, J.J., Lavoie, C., Hendriks, R., Gushue, J., Fazel, A., Pelletier, A., Morre, D.J., Subramaniam, V.N., Hong, W. and Paiement, J. 2000. Role of p97 and Syntaxin 5 in the assembly of transitional endoplasmic reticulum. *Mol. Biol. Cell* 11: 2529-2542.
4. Lavoie, C., Chevet, E., Roy, L., Tonks, N.K., Fazel, A., Posner, B.I., Paiement, J. and Bergeron, J.J. 2000. Tyrosine phosphorylation of p97 regulates transitional endoplasmic reticulum assembly *in vitro*. *Proc. Natl. Acad. Sci. USA* 97: 13637-13642.
5. Watson, R.T. and Pessin, J.E. 2001. Transmembrane domain length determines intracellular membrane compartment localization of Syntaxins 3, 4, and 5. *Am. J. Physiol. Cell Physiol.* 281: C215-223.
6. Xu, Y., Martin, S., James, D.E. and Hong, W. 2002. GS15 forms a SNARE complex with Syntaxin 5, GS28, and Ykt6 and is implicated in traffic in the early *cisternae* of the Golgi apparatus. *Mol. Biol. Cell* 13: 3493-3507.
7. LocusLink Report (LocusID: 6811) <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Stx5a (mouse) mapping to 19 A.

## PRODUCT

Syntaxin 5 (m2): 293T Lysate represents a lysate of mouse Syntaxin 5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Syntaxin 5 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Syntaxin 5 antibodies. Recommended use: 10-20 µl per lane.

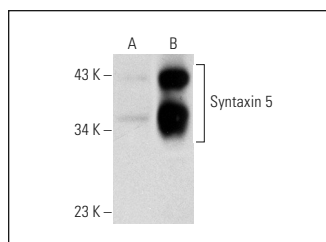
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Syntaxin 5 (B-8): sc-365124 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Syntaxin 5 expression in Syntaxin 5 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



Syntaxin 5 (B-8): sc-365124. Western blot analysis of Syntaxin 5 expression in non-transfected: sc-117752 (A) and mouse Syntaxin 5 transfected: sc-123880 (B) 293T whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.