

# TI-VAMP (H-55): sc-67060

## BACKGROUND

Syntaxins were originally thought to be docking proteins, but have more recently been categorized as anchoring proteins that anchor themselves to the cytoplasmic surfaces of cellular membranes. Syntaxins have been shown to bind to various proteins involved in exocytosis including VAMPs (vesicle-associated membrane proteins, also designated synaptobrevins), NSF (N-ethylmaleimide-sensitive factor), SNAP 25 (synaptosomal-associated protein 25), SNAPs (soluble NSF attachment proteins) and synaptotagmin. Exocytotic vesicles are inserted into the plasma membrane by exocytosis and retrieved by endocytosis. VAMPs are vesicular factors that are important components of the machinery controlling docking and/or fusion of secretory vesicles with their target membrane. Tetanus-insensitive VAMP (TI-VAMP) is a type IV membrane protein that is widely expressed. TI-VAMP and cellubrevin form a SNARE complex at the apical plasma membrane. TI-VAMP is insensitive to clostridial neurotoxins.

## REFERENCES

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2. Galli, T., et al. 1998. A novel tetanus neurotoxin-insensitive vesicle-associated membrane protein in SNARE complexes of the apical plasma membrane of epithelial cells. *Mol. Biol. Cell* 9: 1437-1448.
3. Advani, R.J., et al. 1999. VAMP-7 mediates vesicular transport from endosomes to lysosomes. *J. Cell Biol.* 146: 765-776.
4. Matarazzo, M.R., et al. 1999. Human and mouse SYBL1 gene structure and expression. *Gene* 240: 233-238.
5. Antonin, W., et al. 2000. A SNARE complex mediating fusion of late endosomes defines conserved properties of SNARE structure and function. *EMBO J.* 19: 6453-6464.
6. Ward, D.M., et al. 2000. Syntaxin 7 and VAMP-7 are soluble N-ethylmaleimide-sensitive factor attachment protein receptors required for late endosome-lysosome and homotypic lysosome fusion in alveolar macrophages. *Mol. Biol. Cell* 11: 2327-2333.
7. Matarazzo, M.R., et al. 2002. Allelic inactivation of the pseudoautosomal gene SYBL1 is controlled by epigenetic mechanisms common to the X and Y chromosomes. *Hum. Mol. Genet.* 11: 3191-3198.

## CHROMOSOMAL LOCATION

Genetic locus: VAMP7 (human) mapping to Xq28/Yq12; Vamp7 (mouse) mapping to X.

## SOURCE

TI-VAMP (H-55) is a rabbit polyclonal antibody raised against amino acids 91-145 mapping within an internal region of TI-VAMP of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TI-VAMP (H-55) is recommended for detection of TI-VAMP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

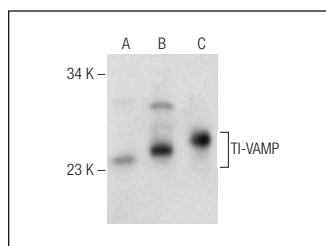
TI-VAMP (H-55) is also recommended for detection of TI-VAMP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TI-VAMP siRNA (h): sc-44606, TI-VAMP siRNA (m): sc-44607, TI-VAMP shRNA Plasmid (h): sc-44606-SH, TI-VAMP shRNA Plasmid (m): sc-44607-SH, TI-VAMP shRNA (h) Lentiviral Particles: sc-44606-V and TI-VAMP shRNA (m) Lentiviral Particles: sc-44607-V.

Molecular Weight of TI-VAMP: 20/25/30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, PC-12 cell lysate: sc-2250 or rat brain extract: sc-2392.

## DATA



TI-VAMP (H-55): sc-67060. Western blot analysis of TI-VAMP expression in HeLa (A) and PC-12 (B) whole cell lysates and rat brain tissue extract (C).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

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

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Try **TI-VAMP (E-12): sc-166394**, our highly recommended monoclonal alternative to TI-VAMP (H-55).