SANTA CRUZ BIOTECHNOLOGY, INC.

Syntaxin 8 (H-140): sc-292442

BACKGROUND

Syntaxins, a family of proteins involved in the fusion of synaptic vesicles with the plasma membrane, display broad tissue distribution and contain C-terminal hydrophobic domains that direct them to their respective intracellular compartments. Syntaxin 8, also known as STX8 or CARB, is a 236 amino acid single-pass type IV membrane protein that contains one t-SNARE coiled-coil homology domain and belongs to the Syntaxin family. Highly expressed in liver, brain, kidney, lung, placenta, spleen, pancreas and skeletal muscle, Syntaxin 8 functions in the early secretory pathway as a vesicle trafficking protein that shuttles proteins from the *cis*-Golgi membrane to the endoplasmic reticulum (ER). In addition, Syntaxin 8 associates with Syntaxin 7, v-SNARE Vti1p and endobrevin to form a SNARE complex that plays a role in the homo-typic fusion of late endosomes.

REFERENCES

1. Steegmaier, M., et al. 1998. Three novel proteins of the Syntaxin/SNAP 25 family. J. Biol. Chem. 273: 34171-34179.
2. Prekeris, R., et al. 1999. Differential roles of Syntaxin 7 and Syntaxin 8 in endosomal trafficking. Mol. Biol. Cell 10: 3891-3908.
3. Thoreau, V., et al. 1999. Molecular cloning, expression analysis, and chromosomal localization of human Syntaxin 8 (STX8). Biochem. Biophys. Res. Commun. 257: 577-583.
4. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604203. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Bogdanovic, A., et al. 2002. Syntaxin 7, Syntaxin 8, Vti1 and VAMP-7 (vesicle-associated membrane protein 7) form an active SNARE complex for early macropinocytic compartment fusion in *Dictyostelium discoideum*. Biochem. J. 368 1: 29-39.
6. Xu, Y., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: STX8 (human) mapping to 17p13.1; Stx8 (mouse) mapping to 11 B3.

SOURCE

Syntaxin 8 (H-140) is a rabbit polyclonal antibody raised against amino acids 1-140 mapping at the N-terminus of Syntaxin 8 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.

STORAGE

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

APPLICATIONS

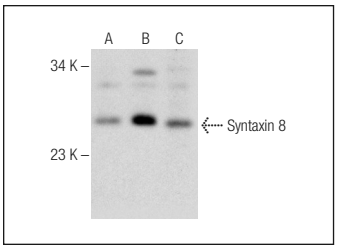
Syntaxin 8 (H-140) is recommended for detection of Syntaxin 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Syntaxin 8 siRNA (h): sc-93822, Syntaxin 8 siRNA (m): sc-153995, Syntaxin 8 shRNA Plasmid (h): sc-93822-SH, Syntaxin 8 shRNA Plasmid (m): sc-153995-SH, Syntaxin 8 shRNA (h) Lentiviral Particles: sc-93822-V and Syntaxin 8 shRNA (m) Lentiviral Particles: sc-153995-V.

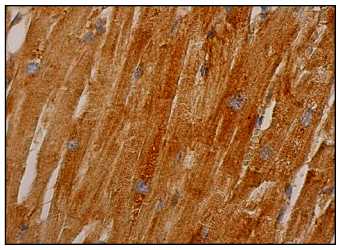
Molecular Weight of Syntaxin 8: 27 kDa.

Positive Controls: A549 whole cell lysate: sc-2413 and Jurkat whole cell lysate: sc-2204 or human kidney extract: sc-363764.

DATA



Syntaxin 8 (H-140): sc-292442. Western blot analysis of Syntaxin 8 expression in A549 (**A**) and Jurkat (**B**) whole cell lysates and human kidney tissue extract (**C**).



Syntaxin 8 (H-140): sc-292442. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **Syntaxin 8 (A-9): sc-376521** or **Syntaxin 8 (48): sc-136092**, our highly recommended monoclonal alternatives to Syntaxin 8 (H-140).