

Syntaxin 8 (A-9): sc-376521

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 homotypic 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 macropinoscytic compartment fusion in *Dictyostelium discoideum*. *Biochem. J.* 368: 29-39.

CHROMOSOMAL LOCATION

Genetic locus: STX8 (human) mapping to 17p13.1.

SOURCE

Syntaxin 8 (A-9) is a mouse monoclonal antibody raised against amino acids 1-140 mapping at the N-terminus of Syntaxin 8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Syntaxin 8 (A-9) is available conjugated to agarose (sc-376521 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376521 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376521 PE), fluorescein (sc-376521 FITC), Alexa Fluor® 488 (sc-376521 AF488), Alexa Fluor® 546 (sc-376521 AF546), Alexa Fluor® 594 (sc-376521 AF594) or Alexa Fluor® 647 (sc-376521 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376521 AF680) or Alexa Fluor® 790 (sc-376521 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Syntaxin 8 (A-9) is recommended for detection of Syntaxin 8 of human origin by Western Blotting (starting dilution 1:100, 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).

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

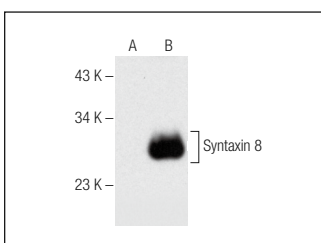
Molecular Weight of Syntaxin 8: 27 kDa.

Positive Controls: Syntaxin 8 (h): 293 Lysate: sc-111333 or WI-38 whole cell lysate: sc-364260.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Syntaxin 8 (A-9): sc-376521. Western blot analysis of Syntaxin 8 expression in non-transfected: sc-110760 (A) and human Syntaxin 8 transfected: sc-111333 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Papadopoulou, A.A., et al. 2019. Signal peptide peptidase-like 2c (SPPL2c) impairs vesicular transport and cleavage of SNARE proteins. *EMBO Rep.* 20: e46451.

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.