SNX4 (m2): 293T Lysate: sc-123700



The Power to Question

BACKGROUND

Sorting nexin 1 (SNX1) is a member of a large family of hydrophilic proteins that interact with a variety of receptor types and are involved in intracellular trafficking. SNX1 and the related splice variant, SNX1A, bind the epidermal growth factor (EGF) receptor, facilitate its transport to lysosome, and thereby contribute to the degradation of the receptor. SNX2 and SNX4 share a high degree of amino acid similarity with SNX1, as they all contain a characteristic phox homology (PX) domain. These proteins are all partially associated with cellular membranes, and they, likewise, associate with EGF, PDGF and Insulin receptor tyrosine kinases. These nexins are widely expressed and yet have various tissue distribution patterns. Additionally, the sorting nexins can associate with each other and with a variety of other cellular proteins, suggesting that they exist as part of multisubunit complexes. The related protein, SNX3, comprises a distinct subgroup of nexins that share less sequence similarity outside of the PX domain and have dramatically different binding affinities for the tyrosine kinase receptors.

REFERENCES

- Trowbridge, I.S., Collawn, J.F. and Hopkins, C.R. 1993. Signal-dependent membrane protein trafficking in the endocytic pathway. Annu. Rev. Cell Biol. 9: 129-161.
- 2. Opresko, L.K., Chang, C.P., Will, B.H., Burke, P.M., Gill, G.N. and Wiley, H.S. 1995. Endocytosis and lysosomal targeting of epidermal growth factor receptors are mediated by distinct sequences independent of the tyrosine kinase domain. J. Biol. Chem. 270: 4325-4333.
- Kurten, R.C., Cadena, D.L. and Gill, G.N. 1996. Enhanced degradation of EGF receptors by a sorting nexin, SNX1. Science 272: 1008-1010.
- Ponting, C.P. 1996. Novel domains in NADPH oxidase subunits, sorting nexins, and Ptdlns 3-kinases: binding partners of SH3 domains? Protein Sci. 5: 2353-2357.
- Horazdovsky, B.F., Davies, B.A., Seaman, M.N., McLaughlin, S.A. and Yoon, S. 1997. Emr SD. A sorting nexin-1 homologue, Vps5p, forms a complex with Vps17p and is required for recycling the vacuolar proteinsorting receptor. Mol. Biol. Cell 8: 1529-1541.
- 6. Haft, C.R., de la Luz Sierra, M., Barr, V.A., Haft, D.H. and Taylor, S.I. 1998. Identification of a family of sorting nexin molecules and characterization of their association with receptors. Mol. Cell. Biol. 18: 7278-7287.

CHROMOSOMAL LOCATION

Genetic locus: Snx4 (mouse) mapping to 16 B3.

PRODUCT

SNX4 (m2): 293T Lysate represents a lysate of mouse SNX4 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.

APPLICATIONS

SNX4 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SNX4 antibodies. Recommended use: 10-20 µl per lane.

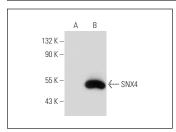
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

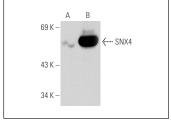
SNX4 (G-3): sc-271403 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SNX4 expression in SNX4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

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

DATA





SNX4 (G-3): sc-271403. Western blot analysis of SNX4 expression in non-transfected: sc-117752 (**A**) and mouse SNX4 transfected: sc-123700 (**B**) 293T whole

SNX4 (B-4): sc-271147. Western blot analysis of SNX4 expression in non-transfected: sc-117752 (**A**) and mouse SNX4 transfected: sc-123700 (**B**) 293T whole cell livestee

RESEARCH USE

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

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com