

SNX12 (m): 293T Lysate: sc-123690

BACKGROUND

SNX12 (sorting nexin 12) is a 172 amino acid member of the sorting nexin (SNX) family of hydrophilic proteins that interact with a variety of receptors and are involved in intracellular trafficking events. Like other members of the sorting nexin family, SNX12 contains one phox (PX) domain which is a conserved motif that functions in phosphoinositide binding, signal transduction, growth factor receptor degradation and NADPH oxidase activity. Via its PX domain, SNX12 is thought to be involved in multiple stages of intracellular trafficking and endocytosis through membranous compartments. Two isoforms of SNX12 exist due to alternative splicing events.

REFERENCES

- 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.
- Teasdale, R.D., Loci, D., Houghton, F., Karlsson, L. and Gleeson, P.A. 2001. A large family of endosome-localized proteins related to sorting nexin 1. *Biochem. J.* 358: 7-16.
- Worby, C.A. and Dixon, J.E. 2002. Sorting out the cellular functions of sorting nexins. *Nat. Rev. Mol. Cell Biol.* 3: 919-931.
- Carlton, J., Bujny, M., Rutherford, A. and Cullen, P. 2005. Sorting nexins—unifying trends and new perspectives. *Traffic* 6: 75-82.
- Wesselkamper, S.C., McDowell, S.A., Medvedovic, M., Dalton, T.P., Case, L.M., Deshmukh, H.S., Sartor, M.A., Henning, L.N., Borchers, M.T., Prows, D.R. Tomlinson, C.R. and Leikauf, G.D. 2006. The role of metallo-thionein in the pathogenesis of acute lung injury. *Am. J. Respir. Cell Mol. Biol.* 34: 73-82.
- Kerr, M.C., Lindsay, M.R., Luetterforst, R., Hamilton, N., Simpson, F., Parton, R.G., Gleeson, P.A. and Teasdale, R.D. 2006. Visualisation of macropinosome maturation by the recruitment of sorting nexins. *J. Cell Sci.* 119: 3967-3980.
- Verges, M. 2007. Retromer and sorting nexins in development. *Front. Biosci.* 12: 3825-3851.
- Cullen, P.J. 2008. Endosomal sorting and signalling: an emerging role for sorting nexins. *Nat. Rev. Mol. Cell. Biol.* 9: 574-582.
- Katz, M.E., Evans, C.J., Heagney, E.E., Vankuyk, P.A., Kelly, J.M. and Cheetham, B.F. 2009. Mutations in genes encoding sorting nexins alter production of intracellular and extracellular proteases in *Aspergillus nidulans*. *Genetics* 181: 1239-1247.

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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Snx12 (mouse) mapping to X C3.

PRODUCT

SNX12 (m): 293T Lysate represents a lysate of mouse SNX12 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

SNX12 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SNX12 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.

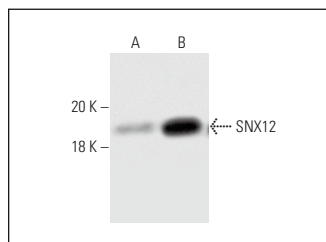
SNX12 (42-Y): sc-101308 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SNX12 expression in SNX12 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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



SNX12 (42-Y): sc-101308. Western blot analysis of SNX12 expression in non-transfected: sc-117752 (A) and mouse SNX12 transfected: sc-123690 (B) 293T whole cell lysates.

RESEARCH USE

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