

# SNX1 (T-19): sc-10609

## 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

1. Trowbridge, I.S., et al. 1993. Signal-dependent membrane protein trafficking in the endocytic pathway. *Annu. Rev. Cell Biol.* 9: 129-161.
2. Opresko, L.K., et al. 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.
3. Ponting, C.P. 1996. Novel domains in NADPH oxidase subunits, sorting nexins, and PtdIns 3-kinases: binding partners of SH3 domains? *Protein Sci.* 5: 2353-2357.
4. Kurten, R.C., et al. 1996. Enhanced degradation of EGF receptors by a sorting nexin, SNX1. *Science* 272: 1008-1010.
5. Horadzovsky, B.F., et al. 1997. A sorting nexin-1 homologue, Vps5p, forms a complex with Vps17p and is required for recycling the vacuolar protein-sorting receptor. *Mol. Biol. Cell* 8: 1529-1541.
6. Haft, C.R., et al. 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: SNX1 (human) mapping to 15q22.31; Snx1 (mouse) mapping to 9 C.

## SOURCE

SNX1 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNX1 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.

Blocking peptide available for competition studies, sc-10609 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SNX1 (T-19) is recommended for detection of SNX1 and SNX1A 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).

SNX1 (T-19) is also recommended for detection of SNX1 and SNX1A in additional species, including bovine and porcine.

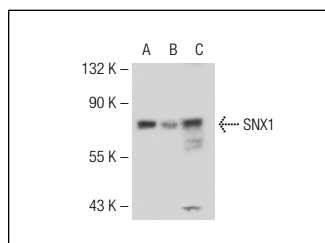
Suitable for use as control antibody for SNX1 siRNA (h): sc-41345, SNX1 siRNA (m): sc-41346, SNX1 shRNA Plasmid (h): sc-41345-SH, SNX1 shRNA Plasmid (m): sc-41346-SH, SNX1 shRNA (h) Lentiviral Particles: sc-41345-V and SNX1 shRNA (m) Lentiviral Particles: sc-41346-V.

Molecular Weight (predicted) of SNX1: 60 kDa.

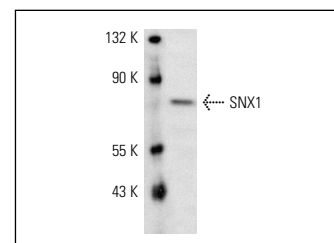
Molecular Weight (observed) of SNX1: 78 kDa.

Positive Controls: SNX1 (m): 293T Lysate: sc-123688, KNRK whole cell lysate: sc-2214 or rat spleen extract: sc-2397.

## DATA



SNX1 (T-19): sc-10609. Western blot analysis of SNX1 expression in non-transfected 293T: sc-117752 (A), mouse SNX1 transfected 293T: sc-123688 (B) and KNRK (C) whole cell lysates.



SNX1 (T-19): sc-10609. Western blot analysis of SNX1 expression in KNRK whole cell lysate.

## 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.



Try **SNX1 (B-8): sc-376376** or **SNX1 (51): sc-136247**, our highly recommended monoclonal alternatives to SNX1 (T-19).