

SNX7 (L-18): sc-49136

BACKGROUND

Sorting nexin (SNX) proteins are members of a large family of hydrophilic PX (phospholipid-binding motif) domain-containing proteins that interact with a variety of receptor types. SNXs are widely expressed, although the tissue distribution of each SNX mRNA varies. The ability of SNXs to bind specific phospholipids, as well as their tendency to form protein-protein complexes, suggests a role for these proteins in cellular membrane trafficking and protein sorting. SNXs may also function specifically in pro-degradative sorting, internalization, endosomal recycling or simply in endosomal sorting. SNXs partially associate with cellular membranes, despite their hydrophilic nature. SNX7 is unique in that it does not have a coiled coil region like some of the SNX family members. Mutations in the SNX7 gene have not been shown to cause any diseases.

REFERENCES

1. Worby, C.A. and Dixon, J.E. 2002. Sorting out the cellular functions of sorting nexins. *Nat. Rev. Mol. Cell Biol.* 3: 919-931.
2. Orlacchio, A., et al. 2005. New locus for hereditary spastic paraplegia maps to chromosome 1p31.1-1p21.1. *Ann. Neurol.* 58: 423-429.
3. Carlton, J.G. and Cullen, P.J. 2005. Sorting nexins. *Curr. Biol.* 15: 819-820.
4. Carlton, J., et al. 2005. Sorting nexins: unifying trends and new perspectives. *Traffic* 6: 75-82.
5. Jacques, C., et al. 2005. Two-step differential expression analysis reveals a new set of genes involved in thyroid oncogenic tumors. *J. Clin. Endocrinol. Metab.* 90: 2314-2320.
6. Kerr, M.C., et al. 2006. Visualisation of macropinosome maturation by the recruitment of sorting nexins. *J. Cell Sci.* 119: 3967-3980.

CHROMOSOMAL LOCATION

Genetic locus: SNX7 (human) mapping to 1p21.3; Snx7 (mouse) mapping to 3 G1.

SOURCE

SNX7 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNX7 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-49136 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

SNX7 (L-18) is recommended for detection of SNX7 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).

SNX7 (L-18) is also recommended for detection of SNX7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SNX7 siRNA (h): sc-61593, SNX7 siRNA (m): sc-61594, SNX7 shRNA Plasmid (h): sc-61593-SH, SNX7 shRNA Plasmid (m): sc-61594-SH, SNX7 shRNA (h) Lentiviral Particles: sc-61593-V and SNX7 shRNA (m) Lentiviral Particles: sc-61594-V.

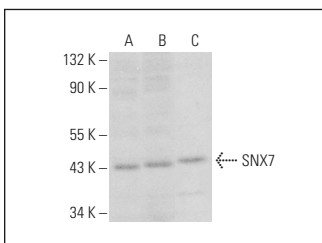
Molecular Weight of SNX7 isoforms 1-3: 45/39/52 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MDA-MB-231 cell lysate: sc-2232 or MCF7 whole cell lysate: sc-2206.

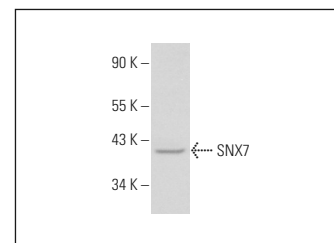
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SNX7 (L-18): sc-49136. Western blot analysis of SNX7 expression in HeLa (A), MCF7 (B) and MDA-MB-231 (C) whole cell lysates.



SNX7 (L-18): sc-49136. Western blot analysis of SNX7 expression in SK-BR-3 whole cell lysate.

PROTOCOLS

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