SANTA CRUZ BIOTECHNOLOGY, INC.

SNX17 (N-14): sc-49127

BACKGROUND

Sorting nexin (SNX) proteins are members of a large family of hydrophilic proteins that interact with a variety of receptor types, are involved in intracellular trafficking and contain a characteristic phox homology (PX) domain. SNX17, which demonstrates ubiquitous expression, contains a PX domain that shares 28% sequence identity with the PX domain of SNX1, as well as a B41 (FERM) domain. The SNX17 gene maps to chromosome 2 and is part of the cellular sorting machinery that regulates cell surface levels of LRP (lipoprotein receptor-related protein) by promoting its recycling. While the PX domain of SNX17 interacts with phosphatidylinositol-3-phosphate for membrane association, the FERM domain and the carboxyl-terminal region aid in LRP binding. Research indicates that SNX17 is localized to the limiting membrane and recycling tubules of early endosomes.

REFERENCES

1. Nomura, N., Nagase, T., Miyajima, N., Sazuka, T., Tanaka, A., Sato, S., Seki, N., Kawarabayasi, Y., Ishikawa, K. and Tabata, S. 1994. Prediction of the coding sequences of unidentified human genes. II. The coding sequences of 40 new genes (KIAA0041-KIAA0080) deduced by analysis of cDNA clones from human cell line KG-1. DNA Res. 1: 223-229.
2. Florian, V., Schlüter, T. and Bohnensack, R. 2001. A new member of the sorting nexin family interacts with the C-terminus of P-Selectin. Biochem. Biophys. Res. Commun. 281: 1045-1050.
3. Stockinger, W., Sailler, B., Strasser, V., Recheis, B., Fasching, D., Kahr, L., Schneider, W.J. and Nimpf, J. 2002. The PX domain protein SNX17 interacts with members of the LDL receptor family and modulates endocytosis of the LDL receptor. EMBO J. 21: 4259-4267.
4. Burden, J.J., Sun, X.M., García, A.B. and Soutar, A.K. 2004. Sorting motifs in the intracellular domain of the low density lipoprotein receptor interact with a novel domain of sorting nexin 17. J. Biol. Chem. 279: 16237-16245.

CHROMOSOMAL LOCATION

Genetic locus: SNX17 (human) mapping to 2p23.3; Snx17 (mouse) mapping to 5 B1.

SOURCE

SNX17 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SNX17 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-49127 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.

APPLICATIONS

SNX17 (N-14) is recommended for detection of SNX17 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).

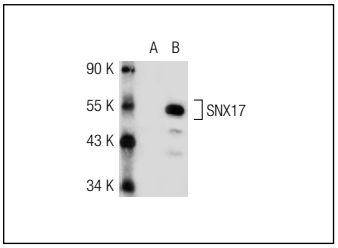
SNX17 (N-14) is also recommended for detection of SNX17 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SNX17 siRNA (h): sc-61587, SNX17 siRNA (m): sc-61588, SNX17 shRNA Plasmid (h): sc-61587-SH, SNX17 shRNA Plasmid (m): sc-61588-SH, SNX17 shRNA (h) Lentiviral Particles: sc-61587-V and SNX17 shRNA (m) Lentiviral Particles: sc-61588-V.

Molecular Weight of SNX17: 53 kDa.

Positive Controls: SNX17 (m): 293T Lysate: sc-123694, ES-2 cell lysate: sc-24674 or HeLa whole cell lysate: sc-2200.

DATA



SNX17 (N-14): sc-49127. Western blot analysis of SNX17 expression in non-transfected: sc-117752 (**A**) and mouse SNX17 transfected: sc-123694 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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