SANTA CRUZ BIOTECHNOLOGY, INC.

SNX27 (K-14): sc-162250

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. SNX27, a 541 amino acid protein localized to the cytoplasm and early endosome, contains the characteristic PX domain, a Ras-associating domain and a PDZ domain, which is responsible for vesicular localization. Expressed in cells of hematopoietic origin, SNX27 recruits CYTIP and SR-4 to participate in endocytic trafficking and recycling pathways. Four named isoforms of SNX27 exist as a result of alternative splicing events.

REFERENCES

1. Joubert, L., et al. 2004. New sorting nexin (SNX27) and NHERF specifically interact with the 5-HT4a receptor splice variant: roles in receptor targeting. J. Cell Sci. 117: 5367-5379.
2. Carlton, J., et al. 2005. Sorting nexins—unifying trends and new perspectives. Traffic 6: 75-82.
3. Seet, L.F. and Hong, W. 2006. The Phox (PX) domain proteins and membrane traffic. Biochim. Biophys. Acta 1761: 878-896.
4. MacNeil, A.J., et al. 2007. Sorting nexin 27 interacts with the cytohesin associated scaffolding protein (CASP) in lymphocytes. Biochem. Biophys. Res. Commun. 359: 848-853.
5. MacNeil, A.J. and Pohajdak, B. 2007. Polarization of endosomal SNX27 in migrating and tumor-engaged natural killer cells. Biochem. Biophys. Res. Commun. 361: 146-150.
6. Nassirpour, R. and Slesinger, P.A. 2007. Subunit-specific regulation of KIR3 channels by sorting nexin 27. Channels 1: 331-333.

CHROMOSOMAL LOCATION

Genetic locus: SNX27 (human) mapping to 1q21.3; Snx27 (mouse) mapping to 3 F2.1.

SOURCE

SNX27 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SNX27 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-162250 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

SNX27 (K-14) is recommended for detection of SNX27 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other SNX family members.

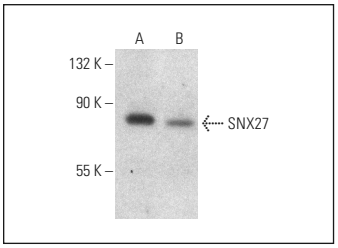
SNX27 (K-14) is also recommended for detection of SNX27 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SNX27 siRNA (h): sc-88812, SNX27 siRNA (m): sc-153673, SNX27 shRNA Plasmid (h): sc-88812-SH, SNX27 shRNA Plasmid (m): sc-153673-SH, SNX27 shRNA (h) Lentiviral Particles: sc-88812-V and SNX27 shRNA (m) Lentiviral Particles: sc-153673-V.

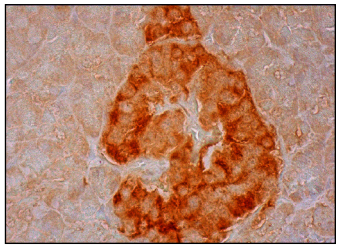
Molecular Weight of SNX27: 61 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or 3T3-L1 cell lysate: sc-2243.

DATA



SNX27 (K-14): sc-162250. Western blot analysis of SNX27 expression in NIH/3T3 (**A**) and 3T3-L1 (**B**) whole cell lysates.



SNX27 (K-14): sc-162250. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

PROTOCOLS

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