SNX31 (A-15): sc-98011



The Power to Question

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. SNX31 (sorting nexin-31) is a 440 amino acid protein that contains one phox domain and belongs to the SNX family. Like other members of the SNX family, SNX31 is thought to play a role in intracellular trafficking events throughout the cell. Two isoforms of SNX31 exist due to alternative splicing events.

REFERENCES

- 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.
- 3. 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.
- 4. Jürgens, G. and Geldner, N. 2007. The high road and the low road: trafficking choices in plants. Cell 130: 977-979.
- 5. Verges, M. 2007. Retromer and sorting nexins in development. Front. Biosci. 12: 3825-3851.
- Alto, N.M., Weflen, A.W., Rardin, M.J., Yarar, D., Lazar, C.S., Tonikian, R., Koller, A., Taylor, S.S., Boone, C., Sidhu, S.S., Schmid, S.L., Hecht, G.A. and Dixon, J.E. 2007. The type III effector EspF coordinates membrane trafficking by the spatiotemporal activation of two eukaryotic signaling pathways. J. Cell Biol. 178: 1265-1278.
- Skanland, S.S., Wälchli, S., Utskarpen, A., Wandinger-Ness, A. and Sandvig, K. 2007. Phosphoinositide-regulated retrograde transport of ricin: crosstalk between hVps34 and sorting nexins. Traffic 8: 297-309.
- Cullen, P.J. 2008. Endosomal sorting and signalling: an emerging role for sorting nexins. Nat. Rev. Mol. Cell Biol. 9: 574-582.

CHROMOSOMAL LOCATION

Genetic locus: SNX31 (human) mapping to 8q22.2.

SOURCE

SNX31 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNX31 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98011 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SNX31 (A-15) is recommended for detection of SNX31 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SNX31 (A-15) is also recommended for detection of SNX31 in additional species, including porcine.

Suitable for use as control antibody for SNX31 siRNA (h): sc-77566, SNX31 shRNA Plasmid (h): sc-77566-SH and SNX31 shRNA (h) Lentiviral Particles: sc-77566-V.

Molecular Weight of SNX31: 51 kDa.

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) 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.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**