SNX2 (Q-18): sc-10614



The Power to Question

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.
- 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 Ptdlns 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.

CHROMOSOMAL LOCATION

Genetic locus: SNX2 (human) mapping to 5q23.2; Snx2 (mouse) mapping to 18 D1.

SOURCE

SNX2 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SNX2 of human origin.

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-10614 P, (100 μ g 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

SNX2 (Q-18) is recommended for detection of SNX2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for SNX2 siRNA (h): sc-41349, SNX2 siRNA (m): sc-41350, SNX2 shRNA Plasmid (h): sc-41349-SH, SNX2 shRNA Plasmid (m): sc-41350-SH, SNX2 shRNA (h) Lentiviral Particles: sc-41349-V and SNX2 shRNA (m) Lentiviral Particles: sc-41350-V.

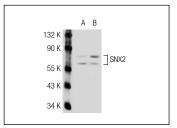
Molecular Weight of SNX2: 68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SNX2 (m): CHO Lysate: sc-110396 or HeLa whole cell lysate: sc-2200.

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



SNX2 (Q-18): sc-10614. Western blot analysis of SNX2 expression in non-transfected: sc-117750 (A) and mouse SNX2 transfected: sc-110396 (B) CHO whole cell lysates.

PROTOCOLS

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



Try SNX2 (F-8): sc-390510 or SNX2 (13): sc-136072, our highly recommended monoclonal alternatives to SNX2 (Q-18).