

SNX20 (D-10): sc-515394

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. SNX20 (sorting nexin 20), also known as SLIC1 (selectin ligand-interactor cytoplasmic 1), is a 316 amino acid sorting protein that cycles PSGL-1 (P-selectin glycoprotein ligand 1) into endosomes. Localizing to nucleus, cytoplasm, cell membrane and endosomes, SNX20 contains one PX (phox homology) domain, exists as four alternatively spliced isoforms and belongs to the sorting nexin family.

REFERENCES

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2. Worby, C.A., et al. 2002. Sorting out the cellular functions of sorting nexins. *Nat. Rev. Mol. Cell Biol.* 3: 919-931.
3. Seet, L.F., et al. 2006. The Phox (PX) domain proteins and membrane traffic. *Biochim. Biophys. Acta* 1761: 878-896.
4. Kerr, M.C., et al. 2006. Visualisation of macropinosome maturation by the recruitment of sorting nexins. *J. Cell Sci.* 119: 3967-3980.
5. Jürgens, G., et al. 2007. The high road and the low road: trafficking choices in plants. *Cell* 130: 977-979.
6. Verges, M. 2007. Retromer and sorting nexins in development. *Front. Biosci.* 12: 3825-3851.
7. Schaff, U.Y., et al. 2008. SLIC-1/sorting nexin 20: a novel sorting nexin that directs subcellular distribution of PSGL-1. *Eur. J. Immunol.* 38: 550-564.
8. 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: SNX20 (human) mapping to 16q12.1; Snx20 (mouse) mapping to 8 C3.

SOURCE

SNX20 (D-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 176-188 within an internal region of SNX20 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515394 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SNX20 (D-10) is recommended for detection of SNX20 isoform 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for SNX20 siRNA (h): sc-92991, SNX20 siRNA (m): sc-153594, SNX20 shRNA Plasmid (h): sc-92991-SH, SNX20 shRNA Plasmid (m): sc-153594-SH, SNX20 shRNA (h) Lentiviral Particles: sc-92991-V and SNX20 shRNA (m) Lentiviral Particles: sc-153594-V.

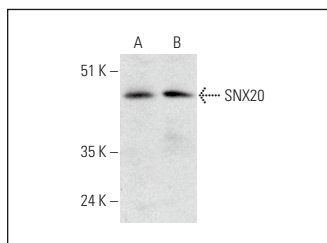
Molecular Weight of SNX20: 36 kDa.

Positive Controls: U-937 cell lysate: sc-2239, COLO 320DM cell lysate: sc-2226 or K-562 whole cell lysate: sc-2203.

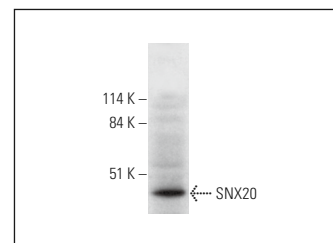
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SNX20 (D-10): sc-515394. Western blot analysis of SNX20 expression in U-937 (A) and COLO 320DM (B) whole cell lysates.



SNX20 (D-10): sc-515394. Western blot analysis of SNX20 expression in K-562 whole cell lysates.

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.

PROTOCOLS

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