SANTA CRUZ BIOTECHNOLOGY, INC.

SNX20 (E-11): sc-390302

SANTA CRUZ BIOTECHNOLOGY

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. 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

1. Teasdale, R.D., et al. 2001. A large family of endosome-localized proteins related to sorting nexin 1. Biochem. J. 358: 7-16.
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.

CHROMOSOMAL LOCATION

Genetic locus: SNX20 (human) mapping to 16q12.1; Snx20 (mouse) mapping to 8 C3.

SOURCE

SNX20 (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 251-281 near the C-terminus of SNX20 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNX20 (E-11) is available conjugated to agarose (sc-390302 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390302 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390302 PE), fluorescein (sc-390302 FITC), Alexa Fluor® 488 (sc-390302 AF488), Alexa Fluor® 546 (sc-390302 AF546), Alexa Fluor® 594 (sc-390302 AF594) or Alexa Fluor® 647 (sc-390302 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390302 AF680) or Alexa Fluor® 790 (sc-390302 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390302 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SNX20 (E-11) 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.

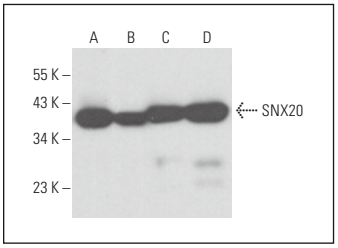
Molecular Weight of SNX20: 36 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or RAW 264.7 whole cell lysate: sc-2211.

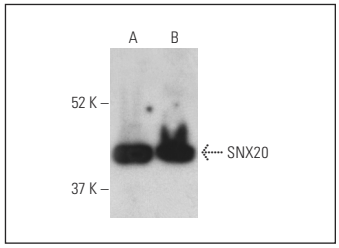
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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 (E-11): sc-390302. Western blot analysis of SNX20 expression in K-562 (**A**), Jurkat (**B**), RAW 264.7 (**C**) and M1 (**D**) whole cell lysates.



SNX20 (E-11) HRP: sc-390302 HRP. Direct western blot analysis of SNX20 expression in RAW 264.7 (**A**) and TK-1 (**B**) 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.