

# SNX18 (F-10): sc-515461

## 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. SNXs partially associate with cellular membranes, despite their hydrophilic nature. SNX18, also known as sorting nexin-associated Golgi protein 1 (SNAG1), is a 628 amino acid member of the SNX family that is involved in several stages of intracellular trafficking. Localized to the intracytoplasmic membrane, SNX18 contains a phox homology domain and a SH2 domain. Two isoforms of SNX18 exist as a result of alternative splicing events.

## REFERENCES

1. Kurten, R.C., et al. 1996. Enhanced degradation of EGF receptors by a sorting nexin, SNX1. *Science* 272: 1008-1010.
2. Ponting, C.P. 1996. Novel domains in NADPH oxidase subunits, sorting nexins, and PtdIns 3-kinases: binding partners of SH3 domains? *Protein Sci.* 5: 2353-2357.
3. Haft, C.R., et al. 1998. Identification of a family of sorting nexin molecules and characterization of their association with receptors. *Mol. Cell. Biol.* 18: 7278-7287.
4. Worby, C.A. and Dixon, J.E. 2002. Sorting out the cellular functions of sorting nexins. *Nature reviews. Mol. Cell. Biol.* 3: 919-931.
5. MacCaulay, S.L., et al. 2003. Insulin stimulates movement of sorting nexin 9 between cellular compartments: a putative role mediating cell surface receptor expression and Insulin action. *Biochem. J.* 376: 123-134.

## CHROMOSOMAL LOCATION

Genetic locus: SNX18 (human) mapping to 5q11.2; Snx18 (mouse) mapping to 13 D2.2.

## SOURCE

SNX18 (F-10) is a mouse monoclonal antibody raised against amino acids 463-510 mapping within an internal region of SNX18 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNX18 (F-10) is available conjugated to agarose (sc-515461 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515461 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515461 PE), fluorescein (sc-515461 FITC), Alexa Fluor® 488 (sc-515461 AF488), Alexa Fluor® 546 (sc-515461 AF546), Alexa Fluor® 594 (sc-515461 AF594) or Alexa Fluor® 647 (sc-515461 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515461 AF680) or Alexa Fluor® 790 (sc-515461 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

SNX18 (F-10) is recommended for detection of SNX18 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 SNX18 siRNA (h): sc-91682, SNX18 siRNA (m): sc-153667, SNX18 shRNA Plasmid (h): sc-91682-SH, SNX18 shRNA Plasmid (m): sc-153667-SH, SNX18 shRNA (h) Lentiviral Particles: sc-91682-V and SNX18 shRNA (m) Lentiviral Particles: sc-153667-V.

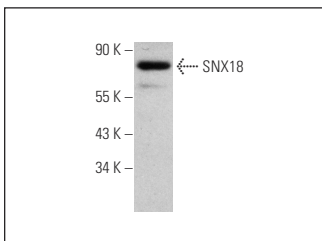
Molecular Weight of SNX18: 69 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or NIH/3T3 whole cell lysate: sc-2210.

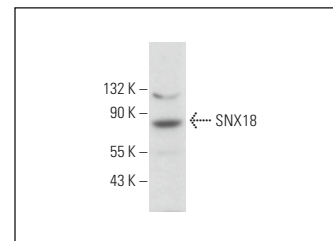
## RECOMMENDED SUPPORT REAGENTS

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



SNX18 (F-10): sc-515461. Western blot analysis of SNX18 expression in SK-N-MC whole cell lysate.



SNX18 (F-10): sc-515461. Western blot analysis of SNX18 expression in NIH/3T3 whole cell lysate.

## 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](http://www.scbt.com) for detailed protocols and support products.

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