

# SNX15 (E-18): sc-49119

## BACKGROUND

Sorting nexin proteins (SNX) are members of a large family of hydrophilic proteins that interact with a variety of receptor types, contain a characteristic phox homology (PX) domain and are involved in intracellular trafficking. SNX15 encodes a deduced 342 amino acid protein, as well as a 256 amino acid splice variant known as SNX15A. Highest expression of SNX15 is observed in skeletal muscle, heart, brain, kidney, spleen, thymus and small intestine tissues. Endogenous and overexpressed SNX15 localize on membranes and in the cytosol. SNX15 associates with itself as well as with SNX1, SNX2, SNX4 and platelet-derived growth factor receptor (PDGFR). Overexpression of SNX15 leads to a decrease in the processing of Insulin and hepatocyte growth factor receptors to their mature subunits, and also results in the mislocalization of Furin, the endoprotease accountable for cleavage of Insulin and hepatocyte growth factor receptors.

## REFERENCES

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2. Barr, V.A., Phillips, S.A., Taylor, S.I. and Haft, C.R. 2000. Overexpression of a novel sorting nexin, SNX15, affects endosome morphology and protein trafficking. *Traffic* 1: 904-916.
3. Phillips, S.A., Barr, V.A., Haft, D.H., Taylor, S.I. and Haft, C.R. 2001. Identification and characterization of SNX15, a novel sorting nexin involved in protein trafficking. *J. Biol. Chem.* 276: 5074-5084.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605964. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Takasu, H., Jee, J.G., Ohno, A., Goda, N., Fujiwara, K., Tochio, H., Shirakawa, M. and Hiroaki, H. 2005. Structural characterization of the MIT domain from human Vps4b. *Biochem. Biophys. Res. Commun.* 334: 460-465.

## CHROMOSOMAL LOCATION

Genetic locus: SNX15 (human) mapping to 11q13.1; Snx15 (mouse) mapping to 19 A.

## SOURCE

SNX15 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNX15 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-49119 P, (100 µg 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.

## APPLICATIONS

SNX15 (E-18) is recommended for detection of SNX15 isoform 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 SNX15 siRNA (h): sc-61583, SNX15 siRNA (m): sc-61584, SNX15 shRNA Plasmid (h): sc-61583-SH, SNX15 shRNA Plasmid (m): sc-61584-SH, SNX15 shRNA (h) Lentiviral Particles: sc-61583-V and SNX15 shRNA (m) Lentiviral Particles: sc-61584-V.

Molecular Weight (predicted) of SNX15: 38 kDa.

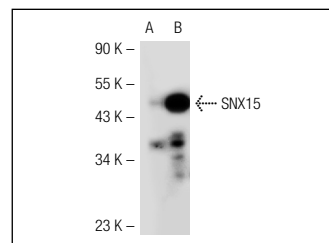
Molecular Weight (observed) of SNX15: 46 kDa.

Positive Controls: SNX15 (m): 293T Lysate: sc-123692.

## 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



SNX15 (E-18): sc-49119. Western blot analysis of SNX15 expression in non-transfected: sc-117752 (A) and mouse SNX15 transfected: sc-123692 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

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