

SNX15 (B-8): sc-393430

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

1. Guru, S.C., et al. 1997. A transcript map for the 2.8 MB region containing the multiple endocrine neoplasia type 1 locus. *Genome Res.* 7: 725-735.
2. Barr, V.A., et al. 2000. Overexpression of a novel sorting nexin, SNX15, affects endosome morphology and protein trafficking. *Traffic* 1: 904-916.

CHROMOSOMAL LOCATION

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

SOURCE

SNX15 (B-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 228-265 within an internal region of SNX15 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.

SNX15 (B-8) is available conjugated to agarose (sc-393430 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393430 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393430 PE), fluorescein (sc-393430 FITC), Alexa Fluor® 488 (sc-393430 AF488), Alexa Fluor® 546 (sc-393430 AF546), Alexa Fluor® 594 (sc-393430 AF594) or Alexa Fluor® 647 (sc-393430 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393430 AF680) or Alexa Fluor® 790 (sc-393430 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393430 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SNX15 (B-8) is recommended for detection of SNX15 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).

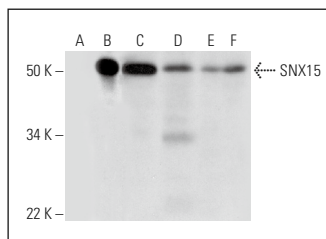
Suitable for use as control antibody for SNX15 siRNA (h): sc-61583, SNX15 siRNA (m): sc-61584, SNX15 shRNA Plasmid (h): sc-61583-SH, SNX15 shRNA Plasmid (m): sc-61584-SH, SNX15 shRNA (h) Lentiviral Particles: sc-61583-V and SNX15 shRNA (m) Lentiviral Particles: sc-61584-V.

Molecular Weight (predicted) of SNX15: 38 kDa.

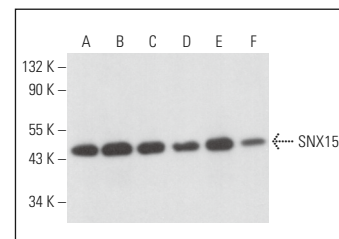
Molecular Weight (observed) of SNX15: 46 kDa.

Positive Controls: SNX15 (m): 293T Lysate: sc-123692, MCF7 whole cell lysate: sc-2206 or human skeletal muscle extract: sc-363776.

DATA



SNX15 (B-8): sc-393430. Western blot analysis of SNX15 expression in non-transfected 293T: sc-117752 (A), mouse SNX15 transfected 293T: sc-123692 (B) and MCF7 (C) whole cell lysates and human skeletal muscle (D), human spleen (E) and human liver (F) tissue extracts.



SNX15 (B-8): sc-393430. Western blot analysis of SNX15 expression in MCF7 (A), Caco-2 (B), K-562 (C), M1 (D), MM-142 (E) and C6 (F) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Sapp, E., et al. 2020. Protein changes in synaptosomes of Huntington's disease knock-in mice are dependent on age and brain region. *Neurobiol. Dis.* 141: 104950.
2. Clippinger, A.K., et al. 2024. IST1 regulates select recycling pathways. *Traffic* 25: e12921.

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.