

SNX2 (F-8): sc-390510



The Power to Question

BACKGROUND

Sorting nexin 1 (SNX1) is a member of a large family of hydrophilic proteins that interact with a variety of receptor types and are involved in intracellular trafficking. SNX1 and the related splice variant, SNX1A, bind the epidermal growth factor (EGF) receptor and facilitate its transport to lysosome, thereby contributing to the degradation of the receptor. SNX2 and SNX4 share a high degree of amino acid similarity with SNX1, as they all contain a characteristic phox homology (PX) domain. These proteins are all partially associated with cellular membranes and they likewise associate with EGF, PDGF and Insulin receptor tyrosine kinases. These nexins are widely expressed and yet have various tissue distribution patterns. Additionally, the sorting nexins can associate with each other and with a variety of other cellular proteins, suggesting that they exist as part of multi-subunit complexes. The related protein, SNX3, comprises a distinct subgroup of nexins that share less sequence similarity outside of the PX domain and have dramatically different binding affinities for the tyrosine kinase receptors.

REFERENCES

1. Trowbridge, I.S., et al. 1993. Signal-dependent membrane protein trafficking in the endocytic pathway. *Annu. Rev. Cell Biol.* 9: 129-161.
2. Opresko, L.K., et al. 1995. Endocytosis and lysosomal targeting of epidermal growth factor receptors are mediated by distinct sequences independent of the tyrosine kinase domain. *J. Biol. Chem.* 270: 4325-4333.
3. Ponting, C.P. 1996. Novel domains in NADPH oxidase subunits, sorting nexins, and Ptdlns 3-kinases: binding partners of SH3 domains? *Protein Sci.* 5: 2353-2357.

CHROMOSOMAL LOCATION

Genetic locus: SNX2 (human) mapping to 5q23.2; Snx2 (mouse) mapping to 18 D1.

SOURCE

SNX2 (F-8) is a mouse monoclonal antibody raised against amino acids 313-500 mapping within an internal region of SNX2 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.

SNX2 (F-8) is available conjugated to agarose (sc-390510 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390510 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390510 PE), fluorescein (sc-390510 FITC), Alexa Fluor® 488 (sc-390510 AF488), Alexa Fluor® 546 (sc-390510 AF546), Alexa Fluor® 594 (sc-390510 AF594) or Alexa Fluor® 647 (sc-390510 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390510 AF680) or Alexa Fluor® 790 (sc-390510 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

SNX2 (F-8) is recommended for detection of SNX2 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), immunohistochemistry (including paraffin-embedded sections) (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 SNX2 siRNA (h): sc-41349, SNX2 siRNA (m): sc-41350, SNX2 shRNA Plasmid (h): sc-41349-SH, SNX2 shRNA Plasmid (m): sc-41350-SH, SNX2 shRNA (h) Lentiviral Particles: sc-41349-V and SNX2 shRNA (m) Lentiviral Particles: sc-41350-V.

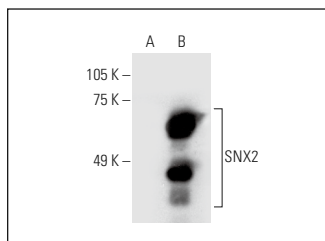
Molecular Weight of SNX2: 68 kDa.

Positive Controls: SNX2 (h): 293 Lysate: sc-110540.

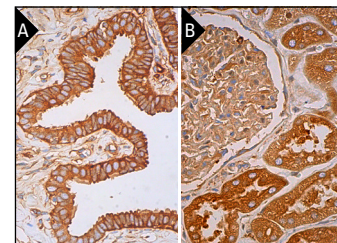
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



SNX2 (F-8): sc-390510. Western blot analysis of SNX2 expression in non-transfected: sc-110760 (A) and human SNX2 transfected: sc-110540 (B) 293 whole cell lysates.



SNX2 (F-8): sc-390510. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and membrane staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomeruli and cells in tubules (B).

SELECT PRODUCT CITATIONS

1. Siddiqi, A., et al. 2018. Human papillomavirus 16 infection induces VAP-dependent endosomal tubulation. *J. Virol.* 92: e01514-17.

STORAGE

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