SANTA CRUZ BIOTECHNOLOGY, INC.

SNX5 (F-11): sc-515215

SANTA CRUZ BIOTECHNOLOGY

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, facilitate its transport to lysosome, and thereby contribute 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 multisubunit 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.

CHROMOSOMAL LOCATION

Genetic locus: SNX5 (human) mapping to 20p11.23; Snx5 (mouse) mapping to 2 G1.

SOURCE

SNX5 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 241-266 within an internal region of SNX5 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNX5 (F-11) is available conjugated to agarose (sc-515215 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515215 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515215 PE), fluorescein (sc-515215 FITC), Alexa Fluor® 488 (sc-515215 AF488), Alexa Fluor® 546 (sc-515215 AF546), Alexa Fluor® 594 (sc-515215 AF594) or Alexa Fluor® 647 (sc-515215 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515215 AF680) or Alexa Fluor® 790 (sc-515215 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515215 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

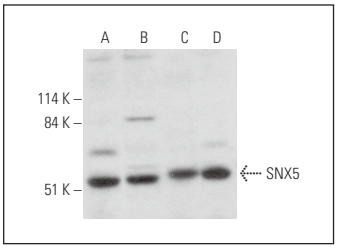
SNX5 (F-11) is recommended for detection of SNX5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SNX5 siRNA (h): sc-41355, SNX5 siRNA (m): sc-41356, SNX5 shRNA Plasmid (h): sc-41355-SH, SNX5 shRNA Plasmid (m): sc-41356-SH, SNX5 shRNA (h) Lentiviral Particles: sc-41355-V and SNX5 shRNA (m) Lentiviral Particles: sc-41356-V.

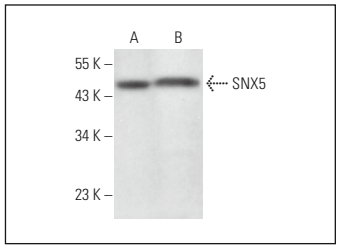
Molecular Weight of SNX5: 51 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

DATA



SNX5 (F-11): sc-515215. Western blot analysis of SNX5 expression in K-562 (**A**), Jurkat (**B**), Neuro-2A (**C**) and A-431 (**D**) whole cell lysates.



SNX5 (F-11): sc-515215. Western blot analysis of SNX5 expression in EOC 20 (**A**) and c4 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Dong, X., et al. 2021. Sorting nexin 5 mediates virus-induced autophagy and immunity. Nature 589: 456-461.
2. Su, H., et al. 2021. Cancer cells escape autophagy inhibition via NRF2-induced macropinocytosis. Cancer Cell 39: 678-693.e11.
3. Markworth, R., et al. 2021. Tubular microdomains of Rab7-positive endosomes retrieve TrkA, a mechanism disrupted in Charcot-Marie-Tooth disease 2B. J. Cell Sci. 134: jcs258559.
4. Zhou, C., et al. 2022. Recycling of autophagosomal components from autolysosomes by the recycler complex. Nat. Cell Biol. 24: 497-512.
5. Tornero-Écija, A., et al. 2023. The association of lipid transfer protein VPS13A with endosomes is mediated by sorting nexin SNX5. Life Sci. Alliance 6: e202201852.

RESEARCH USE

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