SANTA CRUZ BIOTECHNOLOGY, INC.

SNX27 (F-2): sc-515707

BACKGROUND

Sorting nexin (SNX) proteins are members of a large family of hydrophilic proteins that interact with a variety of receptor types, are involved in intracellular trafficking and contain a characteristic phox homology (PX) domain. SNX27, a 541 amino acid protein localized to the cytoplasm and early endosome, contains the characteristic PX domain, a Ras-associating domain and a PDZ domain, which is responsible for vesicular localization. Expressed in cells of hematopoietic origin, SNX27 recruits CYTIP and SR-4 to participate in endocytic trafficking and recycling pathways. Four named isoforms of SNX27 exist as a result of alternative splicing events.

REFERENCES

1. Joubert, L., et al. 2004. New sorting nexin (SNX27) and NHERF specifically interact with the 5-HT4a receptor splice variant: roles in receptor targeting. J. Cell Sci. 117: 5367-5379.
2. Carlton, J., et al. 2005. Sorting nexins—unifying trends and new perspectives. Traffic 6: 75-82.
3. Seet, L.F. and Hong, W. 2006. The Phox (PX) domain proteins and membrane traffic. Biochim. Biophys. Acta 1761: 878-896.
4. MacNeil, A.J., et al. 2007. Sorting nexin 27 interacts with the Cytohesin associated scaffolding protein (CASP) in lymphocytes. Biochem. Biophys. Res. Commun. 359: 848-853.
5. MacNeil, A.J. and Pohajdak, B. 2007. Polarization of endosomal SNX27 in migrating and tumor-engaged natural killer cells. Biochem. Biophys. Res. Commun. 361: 146-150.
6. Nassirpour, R. and Slesinger, P.A. 2007. Subunit-specific regulation of Kir3 channels by sorting nexin 27. Channels 1: 331-333.

CHROMOSOMAL LOCATION

Genetic locus: SNX27 (human) mapping to 1q21.3; Snx27 (mouse) mapping to 3 F2.1.

SOURCE

SNX27 (F-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 449-466 near the C-terminus of SNX27 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNX27 (F-2) is available conjugated to agarose (sc-515707 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515707 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515707 PE), fluorescein (sc-515707 FITC), Alexa Fluor® 488 (sc-515707 AF488), Alexa Fluor® 546 (sc-515707 AF546), Alexa Fluor® 594 (sc-515707 AF594) or Alexa Fluor® 647 (sc-515707 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515707 AF680) or Alexa Fluor® 790 (sc-515707 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SNX27 (F-2) is recommended for detection of SNX27 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 SNX27 siRNA (h): sc-88812, SNX27 siRNA (m): sc-153673, SNX27 shRNA Plasmid (h): sc-88812-SH, SNX27 shRNA Plasmid (m): sc-153673-SH, SNX27 shRNA (h) Lentiviral Particles: sc-88812-V and SNX27 shRNA (m) Lentiviral Particles: sc-153673-V.

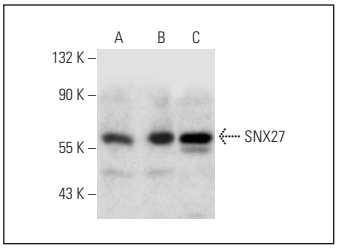
Molecular Weight of SNX27: 61 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or KARPAS-299 whole cell lysate: sc-364781.

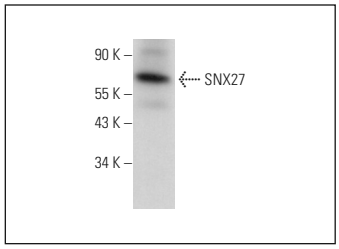
RECOMMENDED SUPPORT REAGENTS

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



SNX27 (F-2): sc-515707. Western blot analysis of SNX27 expression in NIH/3T3 (**A**), 3T3-L1 (**B**) and KARPAS-299 (**C**) whole cell lysates.



SNX27 (F-2): sc-515707. Western blot analysis of SNX27 expression in DU 145 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Xu, X.H., et al. 2022. Tex264 binding to SNX27 regulates Itgα5 receptor membrane recycling and affects cell migration. Biomed Res. Int. 2022: 4304419.

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.