# SANTA CRUZ BIOTECHNOLOGY, INC.

# SNX3 (C-16): sc-10619



# 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: SNX3 (human) mapping to 6q21; Snx3 (mouse) mapping to 10 B2.

## SOURCE

SNX3 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SNX3 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10619 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

SNX3 (C-16) is recommended for detection of SNX3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

SNX3 (C-16) is also recommended for detection of SNX3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SNX3 siRNA (h): sc-41351, SNX3 siRNA (m): sc-41352, SNX3 shRNA Plasmid (h): sc-41351-SH, SNX3 shRNA Plasmid (m): sc-41352-SH, SNX3 shRNA (h) Lentiviral Particles: sc-41351-V and SNX3 shRNA (m) Lentiviral Particles: sc-41352-V.

#### Molecular Weight of SNX3: 20 kDa.

Positive Controls: SNX3 (h2): 293 Lysate: sc-113195, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

## **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) Immunopre-cipitation: 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





SNX3 (C-16): sc-10619. Western blot analysis of SNX3 expression in non-transfected: sc-110760 (A) and human SNX3 transfected: sc-113195 (B) 293 whole cell lysates.

SNX3 (C-16): sc-10619. Western blot analysis of SNX3 expression in HeLa ( $\bf{A}$ ) and A-431 ( $\bf{B}$ ) whole cell lysates.

# SELECT PRODUCT CITATIONS

- Li, K.W., et al. 2004. Proteomics analysis of rat brain postsynaptic density. Implications of the diverse protein functional groups for the integration of synaptic physiology. J. Biol. Chem. 279: 987-1002.
- Malerod, L., et al. 2011. Cargo-dependent degradation of ESCRT-I as a feedback mechanism to modulate endosomal sorting. Traffic 12: 1211-1226.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### PROTOCOLS

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

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Try **SNX3 (G-7): sc-376667**, our highly recommended monoclonal alternative to SNX3 (C-16).