SANTA CRUZ BIOTECHNOLOGY, INC.

SNX33 (N-15): sc-324326

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SNX33 (sorting nexin-33), also known as SH3PX3, SH3PXD3C or SNX30, is a 574 amino acid protein that interacts with ADAM15 and FAS-L. Belonging to the sorting nexin family, SNX33 contains one BAR domain, one PX (phox homology) domain and one SH3 domain. The gene that encodes SNX33 consists of over 14,000 bases and maps to human chromosome 15q24.2. Housing approximately 106 million base pairs and encoding more than 700 genes, chromosome 15 makes up about 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

REFERENCES

1. Knoll, J.H., et al. 1989. Angelman and Prader-Willi syndromes share a common chromosome 15 deletion but differ in parental origin of the deletion. Am. J. Med. Genet. 32: 285-290.
2. Hurowitz, G.I., et al. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. J. Neuropsychiatry Clin. Neurosci. 5: 30-36.
3. Seet, L.F. and Hong, W. 2006. The Phox (PX) domain proteins and membrane traffic. Biochim. Biophys. Acta 1761: 878-896.
4. Schöbel, S., et al. 2008. A novel sorting nexin modulates endocytic trafficking and α-secretase cleavage of the amyloid precursor protein. J. Biol. Chem. 283: 14257-14268.
5. Heiseke, A., et al. 2008. The novel sorting nexin SNX33 interferes with cellular PrP formation by modulation of PrP shedding. Traffic 9: 1116-1129.
6. Voss, M., et al. 2009. Identification of SH3 domain interaction partners of human FasL (CD178) by phage display screening. BMC Immunol. 10: 53.

CHROMOSOMAL LOCATION

Genetic locus: SNX33 (human) mapping to 15q24.2; Snx33 (mouse) mapping to 9 B.

SOURCE

SNX33 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SNX33 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-324326 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SNX33 (N-15) is recommended for detection of SNX33 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other SNX family members.

SNX33 (N-15) is also recommended for detection of SNX33 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SNX33 siRNA (h): sc-89967, SNX33 siRNA (m): sc-153678, SNX33 shRNA Plasmid (h): sc-89967-SH, SNX33 shRNA Plasmid (m): sc-153678-SH, SNX33 shRNA (h) Lentiviral Particles: sc-89967-V and SNX33 shRNA (m) Lentiviral Particles: sc-153678-V.

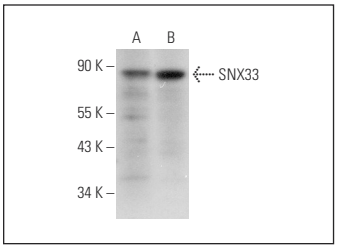
Molecular Weight of SNX33: 65 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or NCI-H929 whole cell lysate: sc-364786.

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) Immunoprecipitation: 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



SNX33 (N-15): sc-324326. Western blot analysis of SNX33 expression in A-431 (**A**) and NCI-H292 (**B**) whole cell lysates.

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.