SANTA CRUZ BIOTECHNOLOGY, INC.

SNAP 29 (C-20)-R: sc-19371-R

BACKGROUND

SNAP 29 (synaptosomal-associated protein, 29 kDa), also known as CEDNIK, is a 258 amino acid protein that localizes to the membrane and the cytoplasm, as well as to the cell junction, and contains one t-SNARE coiled-coil homology domain. Expressed in liver, heart, brain, kidney, placenta, lung, spleen, pancreas and skeletal muscle, SNAP 29 binds tightly to Syntaxins and, via this binding, is involved in membrane trafficking events. Defects in the gene encoding SNAP 29 are the cause of CEDNIK syndrome, a neurocutaneous syndrome that is associated with cerebral dysgenesis, neuropathy, ichthyosis and palmoplantar keratoderma. The gene encoding SNAP 29 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

1. Steegmaier, M., et al. 1998. Three novel proteins of the Syntaxin/SNAP 25 family. J. Biol. Chem. 273: 34171-34179.
2. Hohenstein, A.C. and Roche, P.A. 2001. SNAP 29 is a promiscuous Syntaxin-binding SNARE. Biochem. Biophys. Res. Commun. 285: 167-171.
3. Rotem-Yehudar, R., et al. 2001. Association of insulin-like growth factor 1 receptor with EHD1 and SNAP 29. J. Biol. Chem. 276: 33054-33060.
4. Saito, T., et al. 2001. Polymorphism in SNAP29 gene promoter region associated with schizophrenia. Mol. Psychiatry 6: 193-201.
5. Su, Q., et al. 2001. SNAP 29: a general SNARE protein that inhibits SNARE disassembly and is implicated in synaptic transmission. Proc. Natl. Acad. Sci. USA 98: 14038-14043.
6. Sprecher, E., et al. 2005. A mutation in SNAP 29, coding for a SNARE protein involved in intracellular trafficking, causes a novel neurocutaneous syndrome characterized by cerebral dysgenesis, neuropathy, ichthyosis, and palmoplantar keratoderma. Am. J. Hum. Genet. 77: 242-251.

CHROMOSOMAL LOCATION

Genetic locus: SNAP29 (human) mapping to 22q11.21; Snap29 (mouse) mapping to 16 A3.

SOURCE

SNAP 29 (C-20)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of SNAP 29 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-19371 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SNAP 29 (C-20)-R is recommended for detection of SNAP 29 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).

SNAP 29 (C-20)-R is also recommended for detection of SNAP 29 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SNAP 29 siRNA (h): sc-76531, SNAP 29 siRNA (m): sc-153646, SNAP 29 shRNA Plasmid (h): sc-76531-SH, SNAP 29 shRNA Plasmid (m): sc-153646-SH, SNAP 29 shRNA (h) Lentiviral Particles: sc-76531-V and SNAP 29 shRNA (m) Lentiviral Particles: sc-153646-V.

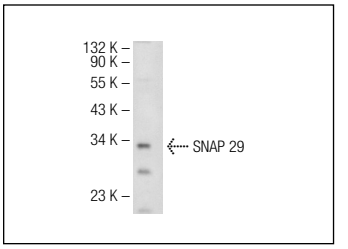
Molecular Weight of SNAP 29: 29 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SNAP 29 (C-20)-R: sc-19371-R. Western blot analysis of SNAP 29 expression in Jurkat whole cell lysate.

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.