

# SNAP 29 (9-YD11): sc-135564

## 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 SNAP 29 gene promoter region associated with schizophrenia. *Mol. Psychiatry* 6: 193-201.

## CHROMOSOMAL LOCATION

Genetic locus: SNAP29 (human) mapping to 22q11.21.

## SOURCE

SNAP 29 (9-YD11) is a mouse monoclonal antibody raised against recombinant SNAP 29 protein of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SNAP 29 (9-YD11) is recommended for detection of SNAP 29 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

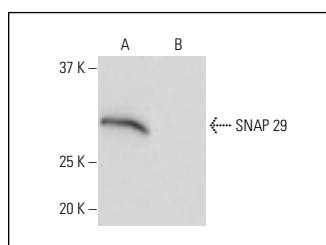
Molecular Weight of SNAP 29: 29 kDa.

Positive Controls: human SNAP 29 transfected 293T whole cell lysate.

## 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).

## DATA



SNAP 29 (9-YD11): sc-135564. Western blot analysis of SNAP 29 expression in human SNAP 29 transfected (A) and non-transfected (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Jiang, J., et al. 2020. Regorafenib induces lethal autophagy arrest by stabilizing PSAT1 in glioblastoma. *Autophagy* 16: 106-122.
2. Moriggi, M., et al. 2021. Muscle proteomic profile before and after enzyme replacement therapy in late-onset Pompe disease. *Int. J. Mol. Sci.* 22: 2850.
3. Shi, J., et al. 2022. Repurposing oxiconazole against colorectal cancer via PRDX2-mediated autophagy arrest. *Int. J. Biol. Sci.* 18: 3747-3761.
4. Rong, Y., et al. 2022. STING controls energy stress-induced autophagy and energy metabolism via STX17. *J. Cell Biol.* 221: e202202060.
5. Zhang, S., et al. 2023. C9orf72-catalyzed GTP loading of Rab39A enables HOPS-mediated membrane tethering and fusion in mammalian autophagy. *Nat. Commun.* 14: 6360.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.