SANTA CRUZ BIOTECHNOLOGY, INC.

SNAP 29 (E-5): sc-390602

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Syntaxins were originally thought to be docking proteins, but have more recently been categorized as anchoring proteins that anchor themselves to the cytoplasmic surfaces of cellular membranes. Syntaxins have been shown to bind to various proteins involved in exocytosis, including VAMPs (vesicle-associated membrane proteins), NSF (N-ethylmaleimide-sensitive factor), SNAP 25 (synaptosomal-associated protein of 25 kDa), SNAPs (soluble NSF attachment proteins) and synaptotagmin. VAMPs (also designated synaptobrevins), including VAMP-1 and VAMP-2, and synaptotagmin, a protein that may function as an inhibitor of exocytosis, are vesicular proteins. SNAPs, including α-SNAP and γ-SNAP, are cytoplasmic proteins that bind to a membrane receptor complex composed of VAMP, SNAP 25 and syntaxin. SNAPs mediate the membrane binding of NSF, which is essential for membrane fusion reactions. An additional protein, designated synaptophysin, may regulate exocytosis by competing with SNAP 25 and syntaxins for VAMP binding.

CHROMOSOMAL LOCATION

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

SOURCE

SNAP 29 (E-5) is a mouse monoclonal antibody raised against amino acids 1-258 representing full length SNAP 29 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNAP 29 (E-5) is available conjugated to agarose (sc-390602 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390602 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390602 PE), fluorescein (sc-390602 FITC), Alexa Fluor® 488 (sc-390602 AF488), Alexa Fluor® 546 (sc-390602 AF546), Alexa Fluor® 594 (sc-390602 AF594) or Alexa Fluor® 647 (sc-390602 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390602 AF680) or Alexa Fluor® 790 (sc-390602 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SNAP 29 (E-5) is recommended for detection of SNAP 29 of 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 SNAP 29 siRNA (h): sc-76531, SNAP 29 shRNA Plasmid (h): sc-76531-SH and SNAP 29 shRNA (h) Lentiviral Particles: sc-76531-V.

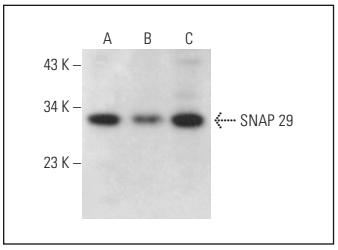
Molecular Weight of SNAP 29: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or MOLT-4 cell lysate: sc-2233.

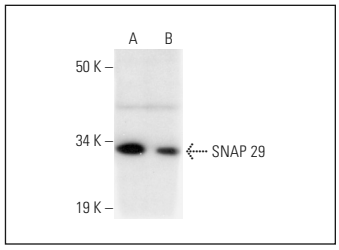
RECOMMENDED SUPPORT REAGENTS

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



SNAP 29 (E-5): sc-390602. Western blot analysis of SNAP 29 expression in Jurkat (**A**), MOLT-4 (**B**) and SJRH30 (**C**) whole cell lysates.



SNAP 29 (E-5): sc-390602. Western blot analysis of SNAP 29 expression in Jurkat (**A**) and HeLa (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Song, D., et al. 2019. Bisphenol A inhibits autophagosome-lysosome fusion and lipid droplet degradation. Ecotoxicol. Environ. Saf. 183: 109492.
2. Shen, Q., et al. 2021. Acetylation of STX17 (Syntaxin 17) controls autophagosome maturation. Autophagy 17: 1157-1169.
3. Arora, K., et al. 2021. A SNARE protein Syntaxin 17 captures CFTR to potentiate autophagosomal clearance under stress. FASEB J. 35: e21185.
4. Pellegrini, F.R., et al. 2023. Blockage of autophagosome-lysosome fusion through SNAP29 O-GlcNAcylation promotes apoptosis via ROS production. Autophagy. E-published.

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 for detailed protocols and support products.