SANTA CRUZ BIOTECHNOLOGY, INC.

Snapin (E-10): sc-514675

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Biogenesis of lysosome-related organelles complex-1 (BLOC-1) is a multi-subunit protein necessary for biogenesis of specialized organelles of the endosomal-lysosomal system (such as melanosomes and platelet-dense granules). The complex consists of coiled-coil-forming proteins Snapin, Pallidin, Cappuccino, Muted, BLOS1, BLOS2 and BLOS3. The localization of these proteins varies as they can be cytoplasmic, peripheral membrane bound or anchored to the vesicular membrane. Snapin associates with the SNARE complex in neurons. Phosphorylation of Snapin increases its interaction with SNAP25 and affects exocytotic protein interactions. Snapin interacts with the N-terminus of regulator of G protein signaling 7 (RGS7), which is important in synaptic vesicle exocytosis.

REFERENCES

1. Ilardi, J.M., et al. 1999. Snapin: a SNARE-associated protein implicated in synaptic transmission. Nat. Neurosci. 2: 119-124.
2. Hunt, R.A., et al. 2003. Snapin interacts with the N-terminus of regulator of G protein signaling 7. Biochem. Biophys. Res. Commun. 303: 594-599.
3. Buxton, P., et al. 2003. Identification and characterization of Snapin as a ubiquitously expressed SNARE-binding protein that interacts with SNAP23 in non-neuronal cells. Biochem. J. 375: 433-440.
4. Starcevic, M., et al. 2004. Identification of snapin and three novel proteins (BLOS1, BLOS2, and BLOS3/reduced pigmentation) as subunits of biogenesis of lysosome-related organelles complex-1 (BLOC-1). J. Biol. Chem. 279: 28393-28401.

CHROMOSOMAL LOCATION

Genetic locus: SNAPIN (human) mapping to 1q21.3; Snapin (mouse) mapping to 3 F1.

SOURCE

Snapin (E-10) is a mouse monoclonal antibody raised against amino acids 1-136 representing full length Snapin 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.

Snapin (E-10) is available conjugated to agarose (sc-514675 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514675 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514675 PE), fluorescein (sc-514675 FITC), Alexa Fluor® 488 (sc-514675 AF488), Alexa Fluor® 546 (sc-514675 AF546), Alexa Fluor® 594 (sc-514675 AF594) or Alexa Fluor® 647 (sc-514675 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514675 AF680) or Alexa Fluor® 790 (sc-514675 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Snapin (E-10) is recommended for detection of Snapin of mouse, rat and 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 Snapin siRNA (h): sc-45545, Snapin siRNA (m): sc-45546, Snapin shRNA Plasmid (h): sc-45545-SH, Snapin shRNA Plasmid (m): sc-45546-SH, Snapin shRNA (h) Lentiviral Particles: sc-45545-V and Snapin shRNA (m) Lentiviral Particles: sc-45546-V.

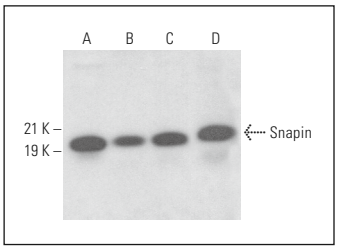
Molecular Weight of Snapin: 15 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Ramos cell lysate: sc-2216 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

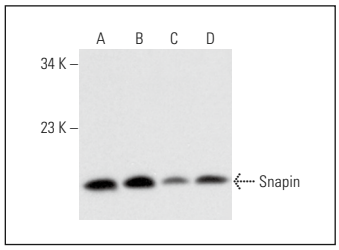
RECOMMENDED SUPPORT REAGENTS

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



Snapin (E-10): sc-514675. Western blot analysis of Snapin expression in Raji (**A**), RAW 264.7 (**B**), J774.A1 (**C**) and KNRK (**D**) whole cell lysates.



Snapin (E-10): sc-514675. Western blot analysis of Snapin expression in Jurkat (**A**), Ramos (**B**), Hs 181 Tes (**C**) and NTERA-2 cl.D1 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhao, C., et al. 2025. Proteomic analysis of differentially expressed proteins in A549 cells infected with H9N2 avian influenza virus. Int. J. Mol. Sci. 26: 657.

STORAGE

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