

SNAP 23 (W-17): sc-22643

BACKGROUND

In eukaryotic cells, the Golgi apparatus receives newly synthesized proteins from the endoplasmic reticulum and delivers them after covalent modification to their destination in the cell. For membrane-directed proteins this process is believed to be carried out via vesicular transport. Correct vesicular transport is determined by specific pairing of vesicle-associated SNAREs (v-SNAREs) with those on the target membrane (t-SNAREs). This complex then recruits soluble NSF attachment proteins (SNAPs) and N-ethylmaleimide-sensitive factor (NSF) to form the highly stable SNAP receptor (SNARE) complex. The formation of a SNARE complex pulls the vesicle and target membrane together and may provide the energy to drive fusion of the lipid bilayers. A SNAP 25 related t-SNARE protein, SNAP 23, is required for exocytosis, suggesting that SNAP 23 may play an important role in membrane fusion events. The human SNAP 23 gene, which maps to chromosome 15q15.1, encodes two SNAP 23 isoforms, SNAP 23A and SNAP 23B. SNAP 23B is identical to a fragment of SNAP 23A, but SNAP 23B lacks 53 amino acid residues (90 to 142) that are present in SNAP 23A. SNAP 23 is ubiquitously expressed and is an important regulator of transport vesicle docking and fusion in all mammalian cells.

CHROMOSOMAL LOCATION

Genetic locus: SNAP23 (human) mapping to 15q15.1; Snap23 (mouse) mapping to 2 E5.

SOURCE

SNAP 23 (W-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNAP-23 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-22643 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SNAP 23 (W-17) is recommended for detection of SNAP-23 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).

Suitable for use as control antibody for SNAP 23 siRNA (h): sc-41308, SNAP 23 siRNA (m): sc-41309, SNAP 23 shRNA Plasmid (h): sc-41308-SH, SNAP 23 shRNA Plasmid (m): sc-41309-SH, SNAP 23 shRNA (h) Lentiviral Particles: sc-41308-V and SNAP 23 shRNA (m) Lentiviral Particles: sc-41309-V.

Molecular Weight (predicted) of SNAP 23: 23 kDa.

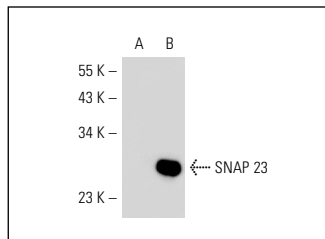
Molecular Weight (observed) of SNAP 23: 26 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211 or SNAP 23 (h): 293 Lysate: sc-110562.

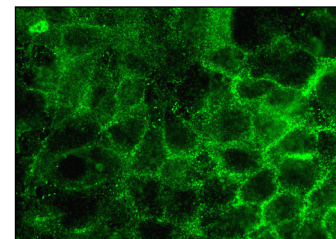
RECOMMENDED SECONDARY REAGENTS

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



SNAP 23 (W-17): sc-22643. Western blot analysis of SNAP 23 expression in non-transfected: sc-110760 (A) and human SNAP 23 transfected: sc-110562 (B) 293 whole cell lysates.



SNAP 23 (W-17): sc-22643. Immunofluorescence staining of formalin-fixed HepG2 cells showing membrane localization.

SELECT PRODUCT CITATIONS

- Han, C., et al. 2009. Human SCAMP5, a novel secretory carrier membrane protein, facilitates calcium-triggered cytokine secretion by interaction with SNARE machinery. *J. Immunol.* 182: 2986-2996.

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 or our catalog for detailed protocols and support products.



Try **SNAP 23 (D-11): sc-374215** or **SNAP 23 (E-5): sc-374060**, our highly recommended monoclonal alternatives to SNAP 23 (W-17).