

α -SNAP (15D4): sc-58217

BACKGROUND

Syntaxins, six of which have been identified, 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 25kDa), 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 - 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NAPA (human) mapping to 19q13.33; Napa (mouse) mapping to 7 A1.

SOURCE

α -SNAP (15D4) is a mouse monoclonal antibody raised against recombinant α -SNAP of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 1% glycerol.

APPLICATIONS

α -SNAP (15D4) is recommended for detection of α -SNAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)]; non cross-reactive with β -SNAP.

Suitable for use as control antibody for α -SNAP siRNA (h): sc-29617, α -SNAP siRNA (m): sc-29618, α -SNAP shRNA Plasmid (h): sc-29617-SH, α -SNAP shRNA Plasmid (m): sc-29618-SH, α -SNAP shRNA (h) Lentiviral Particles: sc-29617-V and α -SNAP shRNA (m) Lentiviral Particles: sc-29618-V.

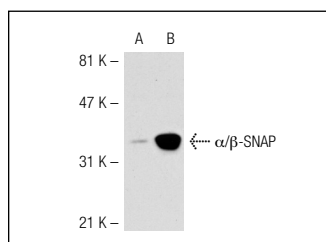
Molecular Weight of α -SNAP: 33 kDa.

Positive Controls: α / β -SNAP (h): 293T Lysate: sc-114765, α -SNAP (m): 293T Lysate: sc-126355 or HeLa whole cell lysate: sc-2200.

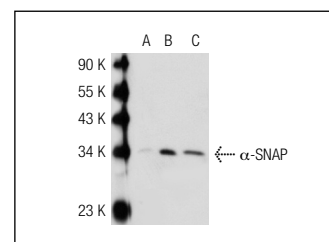
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

DATA



α -SNAP (15D4): sc-58217. Western blot analysis of α / β -SNAP expression in non-transfected: sc-117752 (A) and human α / β -SNAP transfected: sc-114765 (B) 293T whole cell lysates.



α -SNAP (15D4): sc-58217. Western blot analysis of α -SNAP expression in non-transfected 293T: sc-117752 (A), mouse α -SNAP transfected 293T: sc-126355 (B) and HeLa (C) whole cell lysates.

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.