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 25kDa), SNAPs (soluble NSF attachment proteins) and synaptotagmin. VAMPs, also designated synapto-brevins, 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


SOURCE

α-SNAP (4E4) is a mouse monoclonal antibody raised against full length α-SNAP of human origin.

PRODUCT

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

APPLICATIONS

α-SNAP (4E4) 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), 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); non cross-reactive with β-SNAP.

Suitable for use as control antibody for α-SNAP siRNA (m): sc-29617, α-SNAP siRNA (m): sc-29618, α-SNAP shRNA Plasmid (m): sc-29617-SH, γ-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-SNAP (h): 293T Lysate: sc-114765, α-SNAP (m): 293T Lysate: sc-126355 or HeLa whole cell lysate: sc-2200.

DATA

α-SNAP (4E4): sc-58218. Western blot analysis of α/β-SNAP expression in non-transfected 293T: sc-117752 (A), human α/β-SNAP transfected 293T: sc-114765 (B) and HeLa (C) whole cell lysates.

SELECT PRODUCT CITATIONS


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 website at www.scbt.com for detailed protocols and support products.