

VAMP-2 (m): 293T Lysate: sc-126209

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, are vesicular proteins which include VAMP-1, VAMP-2 and synaptotagmin, a protein that may function as an inhibitor of exocytosis. SNAPs, which include 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, synaptophysin, may regulate exocytosis by competing with SNAP 25 and syntaxins for VAMP binding.

REFERENCES

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5. Edelmann, L., et al. 1995. Synaptobrevin binding to synaptophysin: a potential mechanism for controlling the exocytosis fusion machine. *EMBO J.* 14: 224-231.
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7. Lin, R.C. and Scheller, R.H. 1997. Structural organization of the synaptic exocytosis core complex. *Neuron* 19: 1087-1094.
8. Barnard, R.J., et al. 1997. Stimulation of NSF ATPase activity by α -SNAP is required for SNARE complex disassembly and exocytosis. *J. Cell Biol.* 139: 875-883.

CHROMOSOMAL LOCATION

Genetic locus: Vamp2 (mouse) mapping to 11 B3.

PRODUCT

VAMP-2 (m): 293T Lysate represents a lysate of mouse VAMP-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

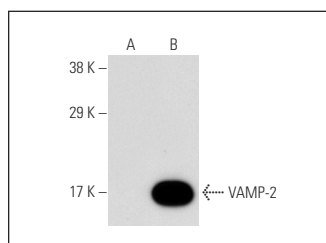
APPLICATIONS

VAMP-2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive VAMP-2 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VAMP-2 (3E5): sc-69706 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse VAMP-2 expression in VAMP-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



VAMP-2 (3E5): sc-69706. Western blot analysis of VAMP-2 expression in non-transfected: sc-117752 (A) and mouse VAMP-2 transfected: sc-126209 (B) 293T whole cell lysates.

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.