

SLMAP (B-9): sc-393336

BACKGROUND

SLMAP (sarcolemmal membrane-associated protein) is a 828 amino acid single-pass type IV membrane protein. Localized to the sarcolemma in non-replicating cells, SLMAP relocates to centrosomes in a microtubule-dependent manner during cleavage in muscle tissues. SLMAP is thought to be involved in protein-protein interactions, as well as play a role in myoblast fusion. As a homodimeric integral membrane protein, SLMAP has two leucine zippers which form a 77 amino acid coiled-coil structure and contains one forkhead-associated (FHA) domain. Coiled-coil structures may be important for the regulation of neurotransmitter release, N-type calcium channels and membrane fusion, while FHA domains are involved in nuclear signaling. SLMAP exists as eight isoforms produced by alternative splicing.

REFERENCES

1. Bennett, M.K., et al. 1992. Syntaxin: a synaptic protein implicated in docking of synaptic vesicles at presynaptic active zones. *Science* 257: 255-259.
2. Kutay, U., et al. 1993. A class of membrane proteins with a C-terminal anchor. *Trends Cell Biol.* 3: 72-75.
3. Franzini-Armstrong, C. and Jorgensen, A.O. 1994. Structure and development of E-C coupling units in skeletal muscle. *Annu. Rev. Physiol.* 56: 509-534.
4. Wigle, J.T., et al. 1997. Molecular cloning, expression, and chromosomal assignment of sarcolemmal-associated proteins. A family of acidic amphipathic α -helical proteins associated with the membrane. *J. Biol. Chem.* 272: 32384-32394.
5. Wielowieyski, P.A., et al. 2000. Alternative splicing, expression, and genomic structure of the 3' region of the gene encoding the sarcolemmal-associated proteins (SLAPs) defines a novel class of coiled-coil tail-anchored membrane proteins. *J. Biol. Chem.* 275: 38474-38481.

CHROMOSOMAL LOCATION

Genetic locus: SLMAP (human) mapping to 3p14.3; Smap (mouse) mapping to 14 A3.

SOURCE

SLMAP (B-9) is a mouse monoclonal antibody raised against amino acids 606-828 mapping at the C-terminus of SLMAP of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SLMAP (B-9) is available conjugated to agarose (sc-393336 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393336 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393336 PE), fluorescein (sc-393336 FITC), Alexa Fluor® 488 (sc-393336 AF488), Alexa Fluor® 546 (sc-393336 AF546), Alexa Fluor® 594 (sc-393336 AF594) or Alexa Fluor® 647 (sc-393336 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393336 AF680) or Alexa Fluor® 790 (sc-393336 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SLMAP (B-9) is recommended for detection of SLMAP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 SLMAP siRNA (h): sc-78464, SLMAP siRNA (m): sc-153600, SLMAP shRNA Plasmid (h): sc-78464-SH, SLMAP shRNA Plasmid (m): sc-153600-SH, SLMAP shRNA (h) Lentiviral Particles: sc-78464-V and SLMAP shRNA (m) Lentiviral Particles: sc-153600-V.

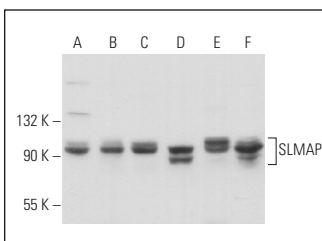
Molecular Weight of SLMAP: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or U-251-MG whole cell lysate: sc-364176.

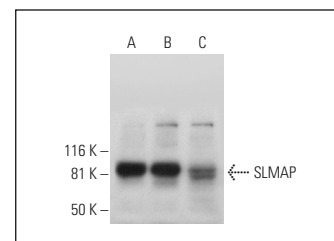
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



SLMAP (B-9): sc-393336. Western blot analysis of SLMAP expression in HeLa (A), RT-4 (B), F9 (C), A-10 (D), NIH/3T3 (E) and C2C12 (F) whole cell lysates.



SLMAP (B-9): sc-393336. Western blot analysis of SLMAP expression in HeLa (A), A-431 (B) and U-251-MG (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.

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