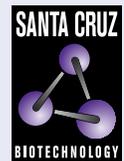


SLMAP (B-9): sc-393336



The Power to Question

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

- Bennett, M.K., et al. 1992. Syntaxin: a synaptic protein implicated in docking of synaptic vesicles at presynaptic active zones. *Science* 257: 255-259.
- Kutay, U., et al. 1993. A class of membrane proteins with a C-terminal anchor. *Trends Cell Biol.* 3: 72-75.
- 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.
- 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.
- 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.

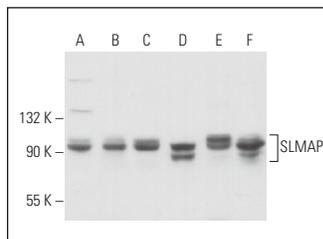
Molecular Weight of SLMAP: 95 kDa.

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

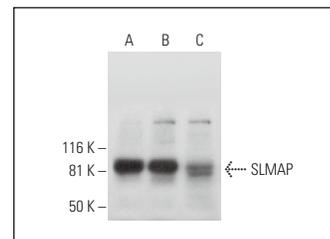
RECOMMENDED SUPPORT REAGENTS

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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