

SLMAP (SJ-09): sc-100957

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.

CHROMOSOMAL LOCATION

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

SOURCE

SLMAP (SJ-09) is a mouse monoclonal antibody raised against recombinant SLMAP of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SLMAP (SJ-09) is recommended for detection of SLMAP 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

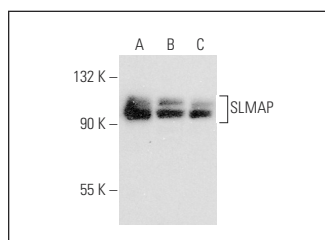
Molecular Weight of SLMAP: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or HCT-116 whole cell lysate: sc-364175.

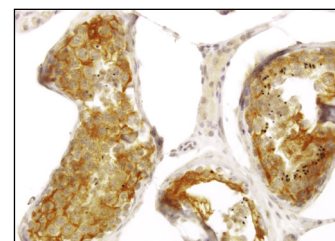
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



SLMAP (SJ-09): sc-100957. Western blot analysis of SLMAP expression in A549 (A), HCT-116 (B) and HeLa (C) whole cell lysates.



SLMAP (SJ-09): sc-100957. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human testis tissue showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Prévilon, M., et al. 2013. Comparative differential proteomic profiles of nonfailing and failing hearts after *in vivo* thoracic aortic constriction in mice overexpressing FKBP12.6. *Physiol. Rep.* 1: e00039.
2. Tang, Y., et al. 2019. Architecture, substructures, and dynamic assembly of STRIPAK complexes in Hippo signaling. *Cell Discov.* 5: 3.
3. Ali, G., et al. 2019. Whole transcriptome targeted gene quantification provides new insights on pulmonary sarcomatoid carcinomas. *Sci. Rep.* 9: 3536.

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 for detailed protocols and support products.