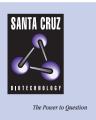
SANTA CRUZ BIOTECHNOLOGY, INC.

SLMAP (S-20): sc-104016



BACKGROUND

SLMAP (sarcolemmal membrane-associated protein) is a 828 amino acid, single-pass, type IV membrane protein. Localized to the sacroolemma 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.
- 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.
- 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; SImap (mouse) mapping to 14 A3.

SOURCE

SLMAP (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SLMAP of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104016 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

SLMAP (S-20) is recommended for detection of SLMAP isoforms 1, 2, 3, 6 and 7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with SLMAP isforms 4, 5 or 8.

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: A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.