SANTA CRUZ BIOTECHNOLOGY, INC.

# SLMAP siRNA (h): sc-78464

## BACKGROUND

SLMAP (sarcolemmal membrane-associated protein) is a 828 amino acid single-pass type IV membrane protein. Localized to the sacrcolemma 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


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4. Wigle, J.T., Demchyshyn, L., Pratt, M.A., Staines, W.A., Salih, M. and Tuana, B.S. 1997. Molecular cloning, expression, and chromosomal assignment of sarcolemmal-associated proteins. A family of acidic amphipathic alpha-helical proteins associated with the membrane. J. Biol. Chem. 272: 32384-32394.
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## CHROMOSOMAL LOCATION

Genetic locus: SLMAP (human) mapping to 3p14.3.

## PRODUCT

SLMAP siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SLMAP shRNA Plasmid (h): sc-78464-SH and SLMAP shRNA (h) Lentiviral Particles: sc-78464-V as alternate gene silencing products.

For independent verification of SLMAP (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-78464A, sc-78464B and sc-78464C.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

SLMAP siRNA (h) is recommended for the inhibition of SLMAP expression in human cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## GENE EXPRESSION MONITORING

SLMAP (B-9): sc-393336 is recommended as a control antibody for monitoring of SLMAP gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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) 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.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SLMAP gene expression knockdown using RT-PCR Primer: SLMAP (h)-PR: sc-78464-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## 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.