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SANTA CRUZ BIOTECHNOLOGY, INC.

# PLSCR2 siRNA (m): sc-152341

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The calcium-dependent mitochondrial membrane protein PLSCR2 (phospholipid scramblase 2) is a member of the phospholipid scramblase (PLS) family. The PLS family consists of membrane-bound enzymes that participate in the bi-directional movement of phospholipids. Human PLSCR2 is a 224 amino acid single-pass membrane protein that shares 59% sequence similarity with human PLSCR1, with most identity in the C-terminal region which includes the calcium binding site. PLSCR2 does not contain the typical proline-rich N-terminal region that other members of the PLS family share, however it does contain PxxP motifs that probably participate in binding proteins with WW or SH3 domains. With exclusive expression in testis, PLSCR2 may play a significant role in the activation of mast cells, fibrin clot formation and in the recognition of injured and apoptotic cells by phagocytes.

## REFERENCES


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## PROTOCOLS

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

## CHROMOSOMAL LOCATION

Genetic locus: Plscr2 (mouse) mapping to 9 E3.3.

## PRODUCT

PLSCR2 siRNA (m) 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 PLSCR2 shRNA Plasmid (m): sc-152341-SH and PLSCR2 shRNA (m) Lentiviral Particles: sc-152341-V as alternate gene silencing products.

For independent verification of PLSCR2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-152341A, sc-152341B and sc-152341C.

## 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

PLSCR2 siRNA (m) is recommended for the inhibition of PLSCR2 expression in mouse 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.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PLSCR2 gene expression knockdown using RT-PCR Primer: PLSCR2 (m)-PR: sc-152341-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.