SANTA CRUZ BIOTECHNOLOGY, INC.

# PMS2L3 siRNA (h): sc-106754

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*The Power to Question*

## BACKGROUND

PMS2L3 (postmeiotic segregation increased 2-like protein 3), also known as PMS2P3, PMS2L9 (postmeiotic segregation increased 2-like protein 9), PMS5 (postmeiotic segregation increased protein 5) or PMSR3, is a 168 amino acid protein that contains one KRAB domain and belongs to the DNA mismatch repair mutL/hexB family. Existing as three alternatively spliced isoforms, PMS2L3 participates in ATP binding and in nucleic acid binding. PMS2L3 may also function as a potential prognostic marker for overall survival in pancreatic cancer patients. The gene that encodes PMS2L3 maps to human chromosome 7q11.23. Chromosome 7 is approximately 158 milllion bases long, encodes over 1,000 genes and makes up approximately 5% of the human genome. Deletions of portions of the q arm of chromosome 7 are linked to myeloid disorders, including acute myelogenous leukemia and myelodysplasia.

## REFERENCES


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## PROTOCOLS

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

## CHROMOSOMAL LOCATION

Genetic locus: PMS2P3 (human) mapping to 7q11.23.

## PRODUCT

PMS2L3 siRNA (h) is a pool of 2 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 PMS2L3 shRNA Plasmid (h): sc-106754-SH and PMS2L3 shRNA (h) Lentiviral Particles: sc-106754-V as alternate gene silencing products.

For independent verification of PMS2L3 (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-106754A and sc-106754B.

## 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

PMS2L3 siRNA (h) is recommended for the inhibition of PMS2L3 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.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PMS2L3 gene expression knockdown using RT-PCR Primer: PMS2L3 (h)-PR: sc-106754-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.