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# PHLDB3 siRNA (m): sc-152229

## BACKGROUND

PHLDB3 (Pleckstrin homology-like domain, family B, member 3) is a 640 amino acid coiled-coil protein that exists as two alternatively spliced isoforms. Containing one PH domain, PHLDB3 mediates phosphoinositide binding. PHLDB3 is up-regulated in hepatitis C-related infections, a major cause of hepatocellular carcinoma. The gene that encodes PHLDB3 maps to human chromosome 19q13.31, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 contains the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including killer cell and leukocyte Ig-like receptors, ICAMs, the CEACAM and PSG families, and Fc $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes are also linked to chromosome 19.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Phldb3 (mouse) mapping to 7 A3.

## PRODUCT

PHLDB3 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PHLDB3 shRNA Plasmid (m): sc-152229-SH and PHLDB3 shRNA (m) Lentiviral Particles: sc-152229-V as alternate gene silencing products.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

PHLDB3 siRNA (m) is recommended for the inhibition of PHLDB3 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  $\mu$ M in 66  $\mu$ l. 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 PHLDB3 gene expression knockdown using RT-PCR Primer: PHLDB3 (m)-PR: sc-152229-PR (20  $\mu$ l). 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](http://www.scbt.com) for detailed protocols and support products.