



PLRP3 siRNA (h): sc-90709

BACKGROUND

PLRP3 (pancreatic lipase-related protein 3), also known as PNLIPRP3, is a 467 amino acid protein that belongs to the AB hydrolase superfamily and the lipase family. Conserved in chimpanzee, canine, chicken, *Drosophila* and mosquito, PLRP3 contains one PLAT domain. PLRP3 participates in hydrolase and triglyceride lipase activities, and may play a role in lipid metabolic processes. PLRP3 is overexpressed in hepatocellular carcinoma (HCC) and altered mRNA expression levels of PLRP3 may be involved in the pathogenesis of HCC. PLRP3 is encoded by a gene that maps to human chromosome 10q25.3, where allelic loss is linked to shorter survival time for HCC patients, suggesting that PLRP3 may serve as a prognostic marker for HCC.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PNLIPRP3 (human) mapping to 10q25.3.

PRODUCT

PLRP3 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PLRP3 shRNA Plasmid (h): sc-90709-SH and PLRP3 shRNA (h) Lentiviral Particles: sc-90709-V as alternate gene silencing products.

For independent verification of PLRP3 (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-90709A, sc-90709B and sc-90709C.

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

APPLICATIONS

PLRP3 siRNA (h) is recommended for the inhibition of PLRP3 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 μ M in 66 μ 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 PLRP3 gene expression knockdown using RT-PCR Primer: PLRP3 (h)-PR: sc-90709-PR (20 μ 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 for detailed protocols and support products.