

# PRPF39 siRNA (h): sc-92372

## BACKGROUND

PRPF39 (PRP39 pre-mRNA processing factor 39 homolog), also known as PRP39 homolog, is a 669 amino acid protein that belongs to the PRP39 family. PRPF39 contains seven HAT repeats and exists as two alternatively spliced isoforms. Localizing to nucleus, PRPF39 is involved in pre-mRNA splicing and binding activities. Conserved in chimpanzee, canine, bovine, mouse, rat, zebrafish, fruit fly, *C. elegans*, *A. thaliana* and rice, the gene that encodes PRPF39 maps to human chromosome 14q21.3. Chromosome 14 contains approximately 700 genes and 106 million base pairs, and makes up 3.5% of human cellular DNA. Chromosome 14 is linked to Alzheimer's disease,  $\alpha$ 1-antitrypsin deficiency and various B cell malignancies.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PRPF39 (human) mapping to 14q21.2.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

PRPF39 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PRPF39 shRNA Plasmid (h): sc-92372-SH and PRPF39 shRNA (h) Lentiviral Particles: sc-92372-V as alternate gene silencing products.

For independent verification of PRPF39 (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-92372A, sc-92372B and sc-92372C.

## 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

PRPF39 siRNA (h) is recommended for the inhibition of PRPF39 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  $\mu$ 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 PRPF39 gene expression knockdown using RT-PCR Primer: PRPF39 (h)-PR: sc-92372-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.