

PRTFDC1 siRNA (h): sc-90611

BACKGROUND

PRTFDC1 (phosphoribosyltransferase domain-containing protein 1), also known as HHGP, is a 225 amino acid protein that belongs to the purine/pyrimidine phosphoribosyltransferase family. The functions of PRTFDC1 are not well understood; however it has been suggested that it is frequently silenced in oral squamous-cell carcinomas by aberrant promoter hypermethylation. Conserved in vertebrates, PRTFDC1 is suggested to be a possible tumor-suppressor. PRTFDC1 is encoded by a gene which maps to chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of the total DNA in cells and encodes nearly 1,200 genes. Three isoforms of PRTFDC1 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRTFDC1 (human) mapping to 10p12.1.

PROTOCOLS

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

PRODUCT

PRTFDC1 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 PRTFDC1 shRNA Plasmid (h): sc-90611-SH and PRTFDC1 shRNA (h) Lentiviral Particles: sc-90611-V as alternate gene silencing products.

For independent verification of PRTFDC1 (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-90611A, sc-90611B and sc-90611C.

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

PRTFDC1 siRNA (h) is recommended for the inhibition of PRTFDC1 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 PRTFDC1 gene expression knockdown using RT-PCR Primer: PRTFDC1 (h)-PR: sc-90611-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.