



PHF24 siRNA (h): sc-92664

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. PHF24 (PHD finger protein 24), also known as KIAA1045, is a 400 amino acid protein containing one PHD-type zinc finger motif, suggesting involvement in transcriptional regulation events. Conserved in chimpanzee, Rhesus monkey, canine, bovine, mouse, rat, chicken, zebrafish and frog, the gene encoding PHF24 is located on human chromosome 9. Chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome. Considered to play a role in gender determination, deletion of the distal portion of chromosome 9p can lead to development of male to female sex reversal, the phenotype of a female with a male XY genotype.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PHF24 (human) mapping to 9p13.3.

PRODUCT

PHF24 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 PHF24 shRNA Plasmid (h): sc-92664-SH and KIAA1045 shRNA (h) Lentiviral Particles: sc-92664-V as alternate gene silencing products.

For independent verification of PHF24 (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-92664A, sc-92664B and sc-92664C.

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

PHF24 siRNA (h) is recommended for the inhibition of PHF24 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 PHF24 gene expression knockdown using RT-PCR Primer: PHF24 (h)-PR: sc-92664-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.