

PHF11 siRNA (m): sc-152207

BACKGROUND

PHF11 (PHD Finger Protein 11A), also known as Phf11a, is a 293 amino acid member of the PHD finger protein family. Members of the PHD finger protein family function as transcriptional regulators that affect gene expression by modulating chromatin structure. With a subcellular localization to the nucleus, PHF11 is expressed in heart, kidney, liver spleen, testis and ureter tissues. PHF11 contains one PHD-type zinc finger domain. PHF11 is thought to interact with HDAC9. It is also thought that PHF11 may be involved in the immune response through regulation of T cell activities in humans, and may operate as a Th1 cell regulator in immune responses in mice. The PHF11 gene is conserved in human, chimpanzee, canine, bovine, rat, and chicken.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Phf11a (mouse) mapping to 14 C3.

PRODUCT

PHF11 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PHF11 shRNA Plasmid (m): sc-152207-SH and PHF11 shRNA (m) Lentiviral Particles: sc-152207-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 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

PHF11 siRNA (m) is recommended for the inhibition of PHF11 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 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 PHF11 gene expression knockdown using RT-PCR Primer: PHF11 (m)-PR: sc-152207-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

SELECT PRODUCT CITATIONS

1. Accornero, F., Schips, T.G., Petrosino, J.M., Gu, S.Q., Kanisicak, O., van Berlo, J.H. and Molkentin, J.D. 2017. BEX1 is an RNA-dependent mediator of cardiomyopathy. *Nat. Commun.* 8: 1875.

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.