

HIPK3 siRNA (m): sc-45655

BACKGROUND

The homeodomain-interacting protein kinase (HIPK) family includes three members, HIPK1, HIPK2 and HIPK3. Each family member contains a conserved protein kinase domain as well as a separate domain, which interacts with homeoproteins. HIPK2 appears to act as a corepressor of homeodomain transcription factors, such as NK-3. Also, HIPK2 is regulated by ubiquitin-like modification via the covalent binding of SUMO-1. Subsequently, it is directed to nuclear bodies *in vitro*.

REFERENCES

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6. Gresko, E., Moller, A., Roscic, A. and Schmitz, M.L. 2005. Covalent modification of human homeodomain interacting protein kinase 2 by SUMO-1 at Lysine 25 affects its stability. *Biochem. Biophys. Res. Commun.* 329: 1293-1299.

CHROMOSOMAL LOCATION

Genetic locus: Hipk3 (mouse) mapping to 2 E2.

PRODUCT

IPK3 siRNA (m) 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 HIPK3 shRNA Plasmid (m): sc-45655-SH and HIPK3 shRNA (m) Lentiviral Particles: sc-45655-V as alternate gene silencing products.

For independent verification of HIPK3 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45655A, sc-45655B and sc-45655C.

PROTOCOLS

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

HIPK3 siRNA (m) is recommended for the inhibition of HIPK3 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 HIPK3 gene expression knockdown using RT-PCR Primer: HIPK3 (m)-PR: sc-45655-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.