

Herc3 siRNA (m): sc-145944

BACKGROUND

Herc3 (HECT domain and RCC1-like domain-containing protein 3) is a 1,050 amino acid protein that localizes to both the cytoplasm and to vesicular-like structures. Involved in protein degradation pathways, Herc3 functions as an E3 ubiquitin ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfers that residue to a protein that is targeted for degradation. Herc3, like other members of the Herc family, contains one HECT (E6AP-type E3 ubiquitin-protein ligase) domain and seven RCC1 repeats through which it conveys its E3 ubiquitin ligase activity. Upon ubiquitination, Herc3 is targeted for proteasomal degradation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Herc3 (mouse) mapping to 6 B3.

PRODUCT

Herc3 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 Herc3 shRNA Plasmid (m): sc-145944-SH and Herc3 shRNA (m) Lentiviral Particles: sc-145944-V as alternate gene silencing products.

For independent verification of Herc3 (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-145944A, sc-145944B and sc-145944C.

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

Herc3 siRNA (m) is recommended for the inhibition of Herc3 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 Herc3 gene expression knockdown using RT-PCR Primer: Herc3 (m)-PR: sc-145944-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.