

Ncapg siRNA (m): sc-149852

BACKGROUND

Ncapg (non-SMC condensin I complex, subunit G), also known as Hcapg, is a 1,004 amino acid murine protein that is encoded by a gene which maps to mouse chromosome 5. Housing over 1,500 genes, mouse chromosome 5 is involved in developmental sex determination and may be responsible for a variety of embryonic lethal mutations. Defects in chromosome 5-localized genes are associated with arthritis, leukemia, seizures and Hermansky-Pudlak syndrome, an autosomal recessive disorder characterized by decreased visual acuity, pigment dilution, nystagmus and lysosomal accumulation of ceroid lipofuscin.

REFERENCES

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4. Gwynn, B., et al. 2000. Defects in the cappuccino (cno) gene on mouse chromosome 5 and human 4p cause Hermansky-Pudlak syndrome by an AP-3-independent mechanism. *Blood* 96: 4227-4235.
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6. Poirier, C., et al. 2007. Three loci on mouse chromosome 5 and 10 modulate sex determination in XX Ods/+ mice. *Genesis* 45: 452-455.
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CHROMOSOMAL LOCATION

Genetic locus: Ncapg (mouse) mapping to 5 B3.

PRODUCT

Ncapg 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 μM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Ncapg shRNA Plasmid (m): sc-149852-SH and Ncapg shRNA (m) Lentiviral Particles: sc-149852-V as alternate gene silencing products.

For independent verification of Ncapg (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-149852A, sc-149852B and sc-149852C.

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 μl of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μl of RNase-free water makes a 10 μM solution in a 10 μM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Ncapg siRNA (m) is recommended for the inhibition of Ncapg 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 μM in 66 μl. 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 Ncapg gene expression knockdown using RT-PCR Primer: Ncapg (m)-PR: sc-149852-PR (20 μl). 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 or our catalog for detailed protocols and support products.