

# HEPACAM2 siRNA (m): sc-140963

## BACKGROUND

HEPACAM (hepatocyte cell adhesion molecule) is a cytoplasmic protein that exists as a homodimer and is involved in regulating both cell-matrix interactions and cell motility. Additionally, HEPACAM is thought to suppress cellular proliferation, suggesting involvement in cell growth inhibition and tumor suppression, specifically with regard to hepatocellular carcinoma. HEPACAM2 is a 462 amino acid single-pass membrane protein that is related to HEPACAM and contains two Ig-like C2-type domains. Like HEPACAM, HEPACAM2 is important in cell-cell adhesion properties. The gene encoding HEPACAM2 is located in a region of human chromosome 7 that is associated with a variation of myoclonus dystonia, a rare genetic movement disorder that is characterized by a combination of dystonia and myoclonic jerks. In this variation, the phenotype of myoclonus dystonia is also associated with mental retardation and microencephaly. There are two isoforms of HEPACAM2 that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HEPACAM2 (mouse) mapping to 6 A1.

## PRODUCT

HEPACAM2 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HEPACAM2 shRNA Plasmid (m): sc-140963-SH and HEPACAM2 shRNA (m) Lentiviral Particles: sc-140963-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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

HEPACAM2 siRNA (m) is recommended for the inhibition of HEPACAM2 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  $\mu$ M in 66  $\mu$ 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 HEPACAM2 gene expression knockdown using RT-PCR Primer: HEPACAM2 (m)-PR: sc-140963-PR (20  $\mu$ 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](http://www.scbt.com) for detailed protocols and support products.