



# DEPDC7 siRNA (m): sc-143010

## BACKGROUND

DEPDC7 (DEP domain-containing protein 7), also known as protein TR2/D15, is a 511 amino acid protein belonging to the DEPDC7 family. DEPDC7 contains one DEP domain and is highly expressed in liver, with lower levels in kidney. DEPDC7 exists as two isoforms produced by alternative splicing events. The gene encoding DEPDC7 maps to human chromosome 11p13 and mouse chromosome 2 E2. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are all associated with defects in chromosome 11.

## REFERENCES

1. Gawin, B., et al. 1999. A 7.5 Mb sequence-ready PAC contig and gene expression map of human chromosome 11p13-p14.1. *Genome Res.* 9: 1074-1086.
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3. Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.
4. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
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## CHROMOSOMAL LOCATION

Genetic locus: *Depdc7* (mouse) mapping to 2 E2.

## PRODUCT

DEPDC7 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 DEPDC7 shRNA Plasmid (m): sc-143010-SH and DEPDC7 shRNA (m) Lentiviral Particles: sc-143010-V as alternate gene silencing products.

## 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.

## 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

DEPDC7 siRNA (m) is recommended for the inhibition of DEPDC7 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 DEPDC7 gene expression knockdown using RT-PCR Primer: DEPDC7 (m)-PR: sc-143010-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.