

# DENND2C siRNA (m): sc-142999

## BACKGROUND

DENND2C (DENN/MADD domain containing 2C) is a 928 amino acid protein that contains a dDENN domain, a DENN domain, and a uDENN domain and exists as three isoforms as a result of alternative splicing. The DENND2C protein is thought to target to actin filaments and control Rab9-dependent trafficking of mannose-6-phosphate receptor to lysosomes. The gene encoding DENND2C maps to human chromosome 1, the largest human chromosome which spans about 260 million base pairs and makes up 8% of the human genome. Other notable genes located on chromosome 1 include LMNA, which is associated with the rare aging disease Hutchinson-Gilford progeria, and the MUTYH gene, which is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Dennd2c (mouse) mapping to 3 F2.2.

## PRODUCT

DENND2C 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 DENND2C shRNA Plasmid (m): sc-142999-SH and DENND2C shRNA (m) Lentiviral Particles: sc-142999-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

DENND2C siRNA (m) is recommended for the inhibition of DENND2C 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 DENND2C gene expression knockdown using RT-PCR Primer: DENND2C (m)-PR: sc-142999-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.