

# DENND4B siRNA (m): sc-143003

## BACKGROUND

DENND4B (DENN/MADD domain containing 4B), also known as KIAA0476, is a 1,496 amino acid protein that contains a dDENN domain, a DENN domain, a uDENN domain, a MABP domain and two PPR (pentatricopeptide) repeats. The DENND4B protein is thought to target a tubular membrane compartment adjacent to the Golgi, where it activates Rab10. The gene encoding DENND4B 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Dennd4b (mouse) mapping to 3 F1.

## PRODUCT

DENND4B 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 DENND4B shRNA Plasmid (m): sc-143003-SH and DENND4B shRNA (m) Lentiviral Particles: sc-143003-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

DENND4B siRNA (m) is recommended for the inhibition of DENND4B 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 DENND4B gene expression knockdown using RT-PCR Primer: DENND4B (m)-PR: sc-143003-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.