

DENND6B siRNA (m): sc-108402

BACKGROUND

DENND6B (DENN domain-containing protein 6B), also known as FAM116B or AF11B, is a 585 amino acid protein that belongs to the DENND6 family. Localizing to the recycling endosome as well as the cytoplasm, DENND6B acts as a guanine nucleotide exchange factor for Rab 14 and, to a lesser extent, Rab 35. The gene encoding DENND6B maps to human chromosome 22q13.33 and mouse chromosome 15 E3. Chromosome 22 contains over 500 genes and about 49 million bases. Phelan-McDermid syndrome, neurofibromatosis type 2 and autism are associated with chromosome 22. A schizophrenia susceptibility locus has been identified on chromosome 22 and studies show that 22q11 deletion symptoms include a high incidence of schizophrenia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Dennd6b (mouse) mapping to 15 E3.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

DENND6B 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DENND6B shRNA Plasmid (m): sc-108402-SH and DENND6B shRNA (m) Lentiviral Particles: sc-108402-V as alternate gene silencing products.

For independent verification of DENND6B (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-108402A, sc-108402B and sc-108402C.

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

APPLICATIONS

DENND6B siRNA (m) is recommended for the inhibition of DENND6B 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 μ M in 66 μ 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 DENND6B gene expression knockdown using RT-PCR Primer: DENND6B (m)-PR: sc-108402-PR (20 μ 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.