SANTA CRUZ BIOTECHNOLOGY, INC.

DENND1A siRNA (h): sc-92634

BACKGROUND

DENND1A (DENN/MADD domain containing 1A), also known as connecdenn, FAM31A or KIAA1608, is a 1,009 amino acid peripheral membrane protein. DENND1A contains a dDENN domain, DENN domain, and uDENN domain, and five DENND1A isoforms exist as a result of alternative splicing. DENND1A interacts with AP2B1, ITSN1 and SH3GL2 and may be involved in the clathrin-mediated endocytosis of synaptic vesicles. The gene encoding DENND1A maps to human chromosome 9q33.3, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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CHROMOSOMAL LOCATION

Genetic locus: DENND1A (human) mapping to 9q33.3.

PRODUCT

DENND1A siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DENND1A shRNA Plasmid (h): sc-92634-SH and DENND1A shRNA (h) Lentiviral Particles: sc-92634-V as alternate gene silencing products.

For independent verification of DENND1A (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-92634A, sc-92634B and sc-92634C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

DENND1A siRNA (h) is recommended for the inhibition of DENND1A expression in human 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 µM in 66 µl. 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 DENND1A gene expression knockdown using RT-PCR Primer: DENND1A (h)-PR: sc-92634-PR (20 µl). 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 for detailed protocols and support products.