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DCST2 siRNA (m): sc-142906

BACKGROUND

DCST2 (DC-STAMP domain containing 2) is a 773 amino acid multi-pass membrane protein that exists as two alternatively spliced isoforms. Conserved in chimpanzee, canine, bovine, mouse, zebrafish, fruit fly, mosquito and *Caenorhabditis elegans*, DCST2 is encoded by a gene that maps to human chromosome 1q21.3. As the largest human chromosome, chromosome 1 spans 260 million base pairs that encode 3,000 genes and makes up 8% of the human genome. Hutchinson-Gilford progeria, familial adenomatous polyposis, Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are all associated with chromosome 1. A breakpoint in 1q is linked to schizophrenia, and aberrations in chromosome 1 exist in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Dcst2 (mouse) mapping to 3 F1.

PRODUCT

DCST2 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 DCST2 shRNA Plasmid (m): sc-142906-SH and DCST2 shRNA (m) Lentiviral Particles: sc-142906-V as alternate gene silencing products.

For independent verification of DCST2 (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-142906A, sc-142906B and sc-142906C.

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

DCST2 siRNA (m) is recommended for the inhibition of DCST2 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 DCST2 gene expression knockdown using RT-PCR Primer: DCST2 (m)-PR: sc-142906-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.