

Ostc siRNA (m): sc-108659

BACKGROUND

DC2, also known as Ostc (oligosaccharyltransferase complex subunit) or hydrophobic protein HSF-28, is a 149 amino acid multi-pass membrane protein belonging to the Ostc family. Conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *Arabidopsis thaliana* and rice, DC2 is a component of the oligosaccharyltransferase (OST) complex and participates in dolichyl-diphosphooligosaccharide-protein glycotransferase activity. The gene that encodes DC2 maps to human chromosome 4q25. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Huntington's disease, thanatophoric dwarfism, achondroplasia, Muenke syndrome, bladder cancer, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease are all associated with chromosome 4. Containing the largest gene deserts (genome regions without protein encoding genes), chromosome 4 exhibits one of the two lowest recombination frequencies of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ostc (mouse) mapping to 3 G3.

PROTOCOLS

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

PRODUCT

Ostc 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Ostc shRNA Plasmid (m): sc-108659-SH and Ostc shRNA (m) Lentiviral Particles: sc-108659-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 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

Ostc siRNA (m) is recommended for the inhibition of Ostc 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 Ostc gene expression knockdown using RT-PCR Primer: Ostc (m)-PR: sc-108659-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.