SANTA CRUZ BIOTECHNOLOGY, INC.

# OST4 siRNA (m): sc-108670

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*The Power to Question*

## BACKGROUND

The mammalian oligosaccharyltransferase (OST) is a protein complex that is composed of at least four rough ER-specific, type I transmembrane proteins: ribophorins I and II (RI and RII), OST48, and DAD1 (also designated defender against apoptotic death). OST4 (oligosaccharyltransferase 4), also known as dolichyl-diphosphooligosaccharide—protein glycosyltransferase subunit 4, is a 37 amino acid single-pass membrane protein and component of the OST complex. Via interactions with N-oligosaccharyl transferase, OST4 may contribute to N-glycosylation. OST4 is encoded by a gene that maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including harlequin icthyosis, sitosterolemia and Alström syndrome.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: Ost4 (mouse) mapping to 5 B1.

## PRODUCT

OST4 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see OST4 shRNA Plasmid (m): sc-108670-SH and OST4 shRNA (m) Lentiviral Particles: sc-108670-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 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

OST4 siRNA (m) is recommended for the inhibition of OST4 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 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 OST4 gene expression knockdown using RT-PCR Primer: OST4 (m)-PR: sc-108670-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.