

# DUS3L siRNA (h): sc-97628

## BACKGROUND

DUS3L (tRNA-dihydrouridine synthase 3-like), also known as DUS3 or FLJ13896, is a 650 amino acid member of the DUS protein family. Utilizing FAD as a cofactor, DUS3L catalyzes the synthesis of dihydrouridine, a modified base found in the D-loop of most tRNAs. DUS3L contains two C3H1-type zinc fingers and is expressed as three isoforms produced by alternative splicing events. The gene that encodes DUS3L maps to human chromosome 19, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc $\alpha$  receptors.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DUS3L (human) mapping to 19p13.3.

## PRODUCT

DUS3L siRNA (h) is a pool of 2 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DUS3L shRNA Plasmid (h): sc-97628-SH and DUS3L shRNA (h) Lentiviral Particles: sc-97628-V as alternate gene silencing products.

For independent verification of DUS3L (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-97628A and sc-97628B.

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

## APPLICATIONS

DUS3L siRNA (h) is recommended for the inhibition of DUS3L 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  $\mu$ M in 66  $\mu$ 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 DUS3L gene expression knockdown using RT-PCR Primer: DUS3L (h)-PR: sc-97628-PR (20  $\mu$ 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.