

# ORCTL2S siRNA (h): sc-96498

## BACKGROUND

ORCTL2S (organic cation transporter-like protein 2 antisense protein), also known as SLC22A18AS (solute carrier family 22 member 18 antisense protein), SLC22A1LS (solute carrier family 22 member 1-like antisense protein) or BWSCR1B (Beckwith-Wiedemann syndrome chromosomal region 1 candidate gene B protein), is a 253 amino acid protein that exists as two alternatively spliced isoforms. While most abundantly expressed in gastrointestinal tissues, ORCTL2S is also expressed at lower levels in fetal brain, kidney, placenta, liver and lung. The gene that encodes ORCTL2S consists of around 16,166 bases and maps to human chromosome 11p15. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SLC22A18AS (human) mapping to 11p15.4.

## PRODUCT

ORCTL2S siRNA (h) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ORCTL2S shRNA Plasmid (h): sc-96498-SH and ORCTL2S shRNA (h) Lentiviral Particles: sc-96498-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  $\mu$ 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

ORCTL2S siRNA (h) is recommended for the inhibition of ORCTL2S 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 ORCTL2S gene expression knockdown using RT-PCR Primer: ORCTL2S (h)-PR: sc-96498-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.