

SEC14L1 siRNA (h): sc-93981

BACKGROUND

SEC14L1 (SEC14-like protein 1) is a 715 amino acid protein that is ubiquitously expressed and belongs to the SEC14 cytosolic factor family. SEC14L1 has similarity to yeast SEC14 and to Japanese flying squid RALBP, which suggests a possible role of SEC14L1 in an intracellular transport system. The SEC14L1 protein contains a CRAL-TRIO domain, a GOLD domain and a PRELI/MSF1 domain. Existing as three alternatively spliced isoforms, the SEC14L1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and *C.elegans*, and maps to human chromosome 17q25.2. The SEC14L1 gene consists of 18 exons ranging in size from 70 bp (exon 11) to 3,088 bp (exon 17) and spanning at least 58 kb of genomic DNA. Exon 17 contains a highly polymorphic VNTR and seems to be present only in the larger ubiquitously expressed 5.5-kb transcript.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEC14L1 (human) mapping to 17q25.2.

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.

PRODUCT

SEC14L1 siRNA (h) 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 SEC14L1 shRNA Plasmid (h): sc-93981-SH and SEC14L1 shRNA (h) Lentiviral Particles: sc-93981-V as alternate gene silencing products.

For independent verification of SEC14L1 (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-93981A, sc-93981B and sc-93981C.

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

SEC14L1 siRNA (h) is recommended for the inhibition of SEC14L1 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 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 SEC14L1 gene expression knockdown using RT-PCR Primer: SEC14L1 (h)-PR: sc-93981-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.