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# SEC14L5 siRNA (m): sc-153302

## BACKGROUND

SEC14L5 (SEC14-like protein 5) is a 696 amino acid protein that contains a CRAL-TRIO domain, a GOLD domain and a PRELI/MSF1 domain. There are at least five genes in the subgroup of SEC14-containing proteins, termed SEC14L1-SEC14L5, three of which are within 100 kb of each other on chromosome 22q12.1, namely SEC14L2, SEC14L3 and SEC14L4. The SEC14L5 gene is conserved in canine, bovine, mouse, rat, chicken, fruit fly and mosquito, and maps to human chromosome 16p13.3. Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. Crohn's disease is a gastrointestinal inflammatory condition also associated with chromosome 16 but through the NOD2 gene.

## REFERENCES

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2. Ben Hamida, C., Cavalier, L., Belal, S., Sanhaji, H., Nadal, N., Barhoumi, C., M'Rissa, N., Marzouki, N., Mandel, J.L., Ben Hamida, M., Koenig, M. and Hentati, F. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
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## CHROMOSOMAL LOCATION

Genetic locus: Sec14l5 (mouse) mapping to 16 A1.

## PRODUCT

SEC14L5 siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SEC14L5 shRNA Plasmid (m): sc-153302-SH and SEC14L5 shRNA (m) Lentiviral Particles: sc-153302-V as alternate gene silencing products.

For independent verification of SEC14L5 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153302A, sc-153302B and sc-153302C.

## 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

SEC14L5 siRNA (m) is recommended for the inhibition of SEC14L5 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  $\mu$ 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 SEC14L5 gene expression knockdown using RT-PCR Primer: SEC14L5 (m)-PR: sc-153302-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.