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SEC16S siRNA (m): sc-153304

BACKGROUND

SEC16S, also known as SEC16 homolog B, RGPR, RGPR-p117 (regucalcin gene promoter region-related protein p117) or LZTR2 (leucine zipper transcription regulator 2), is a 1,060 amino acid peripheral membrane protein of the Golgi apparatus and endoplasmic reticulum that is required for normal transitional endoplasmic reticulum (tER) organization. A member of the SEC16 family, SEC16S is the mammalian homolog of *S. cerevisiae* Sec16, which is essential during protein export. SEC16S functions as a transcription factor by binding the TTGGC motif of SMP30 (also known as regucalcin), thereby enhancing regucalcin mRNA expression. Ubiquitously expressed and existing as three alternatively spliced isoforms, SEC16S is encoded by a gene that maps to human chromosome 1q25.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Sec16b (mouse) mapping to 1 H1.

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

SEC16S 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SEC16S shRNA Plasmid (m): sc-153304-SH and SEC16S shRNA (m) Lentiviral Particles: sc-153304-V as alternate gene silencing products.

For independent verification of SEC16S (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-153304A, sc-153304B and sc-153304C.

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

SEC16S siRNA (m) is recommended for the inhibition of SEC16S 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 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 SEC16S gene expression knockdown using RT-PCR Primer: SEC16S (m)-PR: sc-153304-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.