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# GLG1 siRNA (m): sc-145420

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*The Power to Question*

## BACKGROUND

GLG1 (Golgi apparatus protein 1), also known as CFR1 (cysteine-rich fibroblast growth factor receptor), ESL1 (E-selectin ligand 1) or MG160 (Golgi sialoglycoprotein MG-160), is a 1,179 amino acid single-pass type I membrane protein localized to Golgi apparatus. Widely expressed in both adult and fetal tissues, GLG1 is found in kidney, liver, lung and brain, with highest levels in pancreas, skeletal muscle, placenta, heart, testis and ovary. The early appearance and ubiquitous presence of GLG1 suggests that the protein plays an important role in the production and function of Golgi apparatus. GLG1 binds E-selectin, a process which requires GLG1 fucosylation, and FGF. GLG1 contains 16 cys-rich GLG1 repeats and exists as 2 alternatively spliced isoforms. The gene encoding GLG1 maps to human chromosome 16q23.1 and mouse chromosome 8 E1.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: Glg1 (mouse) mapping to 8 E1.

## PRODUCT

GLG1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GLG1 shRNA Plasmid (m): sc-145420-SH and GLG1 shRNA (m) Lentiviral Particles: sc-145420-V as alternate gene silencing products.

For independent verification of GLG1 (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-145420A, sc-145420B and sc-145420C.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

GLG1 siRNA (m) is recommended for the inhibition of GLG1 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 µM in 66 µl. 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 GLG1 gene expression knockdown using RT-PCR Primer: GLG1 (m)-PR: sc-145420-PR (20 µl). 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 for detailed protocols and support products.