

GOLT1B siRNA (h): sc-96011

BACKGROUND

The Golgi complex plays an essential role in the post-translational modification and sorting of proteins transported from the endoplasmic reticulum (ER). The Golgi stack consists of a distinct *cis* face, or entry face, and a *trans* face, or exit face, which are connected via the *cis*, medial and *trans* Golgi networks. GOLT1B (Golgi transport 1B), also known as putative NFκB-activating protein 470 or hGOT1a, is a 138 amino acid multi-pass membrane protein that belongs to the GOT1 family. Localizing to Golgi apparatus, GOLT1B may play a role in the fusion of ER-derived transport vesicles to the Golgi complex. The gene encoding GOLT1B maps to human chromosome 12p12.1 and mouse chromosome 6 G2. Human chromosome 12 encodes over 1,100 genes and comprises approximately 4.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GOLT1B (human) mapping to 12p12.1.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

GOLT1B 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 μM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GOLT1B shRNA Plasmid (h): sc-96011-SH and GOLT1B shRNA (h) Lentiviral Particles: sc-96011-V as alternate gene silencing products.

For independent verification of GOLT1B (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-96011A, sc-96011B and sc-96011C.

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

GOLT1B siRNA (h) is recommended for the inhibition of GOLT1B 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 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 GOLT1B gene expression knockdown using RT-PCR Primer: GOLT1B (h)-PR: sc-96011-PR (20 μl, 410 bp). 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.