

GOLGA80 siRNA (h): sc-90093

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. GOLGA80 (golgin subfamily A member 80) is a 632 amino acid protein that belongs to the GOLGA6 family. Existing as two alternatively spliced isoforms, the gene encoding GOLGA80 maps to human chromosome 15, which encodes more than 700 genes and is approximately 3% of the human genome.

Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GOLGA80 (human) mapping to 15q13.3.

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

GOLGA80 siRNA (h) is a target-specific 19-25 nt siRNA 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 GOLGA80 shRNA Plasmid (h): sc-90093-SH and GOLGA80 shRNA (h) Lentiviral Particles: sc-90093-V as alternate gene silencing products.

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

GOLGA80 siRNA (h) is recommended for the inhibition of GOLGA80 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 GOLGA80 gene expression knockdown using RT-PCR Primer: GOLGA80 (h)-PR: sc-90093-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.