SANTA CRUZ BIOTECHNOLOGY, INC.

GOLGA6A-D siRNA (h): sc-156177

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. Localizing primarily to the Golgi apparatus, the golgin A6 (GOLGA6) family of proteins contains four highly homologous members designated GOLGA6A, GOLGA6B, GOLGA6C and GOLGA6D. The genes encoding these 693 amino acid proteins map to human chromosome 15. Containing more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and is about 3% of the human genome. Angelman and Prader-Willi syndromes, as well as Tay-Sachs disease, are associated with mutations of genes encoded by chromosome 15.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GOLGA6A/GOLGA6B (human) mapping to 15q24.1, GOLGA6C/ GOLGA6D (human) mapping to 15q24.2.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

GOLGA6A-D 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 GOLGA6A-D shRNA Plasmid (h): sc-156177-SH and GOLGA6A-D shRNA (h) Lentiviral Particles: sc-156177-V as alternate gene silencing products.

For independent verification of GOLGA6A-D (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-156177A, sc-156177B and sc-156177C.

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

GOLGA6A-D siRNA (h) is recommended for the inhibition of GOLGA6A-D 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 GOLGA6A-D gene expression knockdown using RT-PCR Primer: GOLGA6A-D (h)-PR: sc-156177-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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