SANTA CRUZ BIOTECHNOLOGY, INC.

GOLGA8B siRNA (h): sc-106814

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 to Golgi apparatus, the GOLGA8 family of proteins includes two highly homologous members encoded by genes mapping to human chromosome 15q14. These related proteins, designated GOLGA8A (golgin subfamily A member 8A) and GOLGA8B (golgin subfamily A member 8B), contain between 600-650 amino acids and may be involved in maintaining Golgi structure. Existing as two alternatively spliced isoforms, the genes encoding GOLGA8A and GOLGA8B map to human chromosome 15q14.

REFERENCES

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2. Jakymiw, A., et al. 2000. Identification and characterization of a novel Golgi protein, golgin-67. J. Biol. Chem. 275: 4137-4144.
3. Ríos, R.M., et al. 2004. GMAP-210 recruits γ-tubulin complexes to *cis*-Golgi membranes and is required for Golgi ribbon formation. Cell 118: 323-335.
4. Ouchi, M., et al. 2005. Proteomic analysis of vitreous from diabetic macular edema. Exp. Eye Res. 81: 176-182.
5. Barr, F.A. and Egerer, J. 2005. Golgi positioning: are we looking at the right MAP? J. Cell Biol. 168: 993-998.
6. Zody, M.C., et al. 2006. Analysis of the DNA sequence and duplication history of human chromosome 15. Nature 440: 671-675.
7. Solouki, A.M., et al. 2010. A genome-wide association study identifies a susceptibility locus for refractive errors and myopia at 15q14. Nat. Genet. 42: 897-901.

CHROMOSOMAL LOCATION

Genetic locus: GOLGA8B (human) mapping to 15q14.

PRODUCT

GOLGA8B 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 GOLGA8B shRNA Plasmid (h): sc-106814-SH and GOLGA8B shRNA (h) Lentiviral Particles: sc-106814-V as alternate gene silencing products.

For independent verification of GOLGA8B (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-106814A, sc-106814B and sc-106814C.

PROTOCOLS

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

GOLGA8B siRNA (h) is recommended for the inhibition of GOLGA8B 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 GOLGA8B gene expression knockdown using RT-PCR Primer: GOLGA8B (h)-PR: sc-106814-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.