SANTA CRUZ BIOTECHNOLOGY, INC.

SCGB1D4 siRNA (h): sc-96972

BACKGROUND

SCGB1D4 (secretoglobin, family 1D, member 4) is an 83 amino acid secreted protein that belongs to the secretoglobin family and the Lipophilin subfamily. The SCGB1D4 protein is expressed in all tissues with the highest level of expression detectable in lymph nodes, tonsil, cultured lymphoblasts and ovary. The SCGB1D4 gene has a frameshift mutation in the C-terminal end of the coding region that does not affect the important functional domains of the protein. SCGB1D4 seems to be involved in the regulation of chemotactic cell migration and invasion. Induction of the SCGB1D4 protein is caused by IFN-γ. The SCGB1D4 gene maps to human chromosome 11q12.3. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are all associated with defects in chromosome 11.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: SCGB1D4 (human) mapping to 11q12.3.

PRODUCT

SCGB1D4 siRNA (h) is a pool of 2 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 SCGB1D4 shRNA Plasmid (h): sc-96972-SH and SCGB1D4 shRNA (h) Lentiviral Particles: sc-96972-V as alternate gene silencing products.

For independent verification of SCGB1D4 (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-96972A and sc-96972B.

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

SCGB1D4 siRNA (h) is recommended for the inhibition of SCGB1D4 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.

RESEARCH USE

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