SANTA CRUZ BIOTECHNOLOGY, INC.

IGSF9B siRNA (m): sc-146194

BACKGROUND

IGSF9B (immunoglobulin superfamily member 9B), also known as protein turtle homolog B or KIAA1030, is a 1,349 amino acid single-pass type I membrane protein that belongs to the immunoglobulin superfamily and turtle family. Members of this family of proteins usually localize to the cell membrane, and may act as receptors in immune response pathways. Containing two fibronectin type-III domains and five Ig-like (immunoglobulin-like) domains, IGSF9B may be involved in cell signaling. IGSF9B is highly expressed in brain, with lower levels of expression found in heart, testis, ovary, liver, skeletal muscle, spinal cord and fetal brain. The gene encoding IGSF9B maps to human chromosome 11q25, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

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CHROMOSOMAL LOCATION

Genetic locus: Igsf9b (mouse) mapping to 9 A4.

RESEARCH USE

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

PRODUCT

IGSF9B siRNA (m) 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 IGSF9B shRNA Plasmid (m): sc-146194-SH and IGSF9B shRNA (m) Lentiviral Particles: sc-146194-V as alternate gene silencing products.

For independent verification of IGSF9B (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-146194A, sc-146194B and sc-146194C.

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

IGSF9B siRNA (m) is recommended for the inhibition of IGSF9B expression in mouse 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 IGSF9B gene expression knockdown using RT-PCR Primer: IGSF9B (m)-PR: sc-146194-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.