SANTA CRUZ BIOTECHNOLOGY, INC.

IGSF4B siRNA (h): sc-88048

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The Power to Question

BACKGROUND

Immunoglobulin superfamily member 4B (cell adhesion molecule 3, Nectin-like protein 1) is a nectin family gene product that contains two Ig-like C2-type (immunoglobulin-like) domains and an Ig-like V-type (immunoglobulin-like) domain. IGSF4B is a single-pass type I membrane protein that localizes to cell-cell interacting sites along the plasma membrane. IGSF4B functions as a cell adhesion molecule at cell-cell junctions. IGSF4B can be found as a homodimer and has a dual calcium-independent adhesion function; a homophilic cell-cell interaction and a heterophilic cell-cell interaction involving IGSF4, Nectin 1 and Nectin 3. IGSF4B may also interact with EPB41L1 which has a potential for regulating structure or function of cell-cell junctions by similarity. Isoform 1 is expressed in adult and fetal brain. Isoform 2 is highly expressed in the cerebellum but is also weakly expressed in placenta. IGSF4B has been found to be markedly over-expressed in glioma cell lines and prostate cancer cell lines.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CADM3 (human) mapping to 1q23.2.

PRODUCT

IGSF4B 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 IGSF4B shRNA Plasmid (h): sc-88048-SH and IGSF4B shRNA (h) Lentiviral Particles: sc-88048-V as alternate gene silencing products.

For independent verification of IGSF4B (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-88048A, sc-88048B and sc-88048C.

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

IGSF4B siRNA (h) is recommended for the inhibition of IGSF4B 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 IGSF4B gene expression knockdown using RT-PCR Primer: IGSF4B (h)-PR: sc-88048-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.

PROTOCOLS

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