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IGSF10 siRNA (m): sc-146186

BACKGROUND

Ig (immunoglobulin) superfamily members exhibit functional characteristics including immune responses, growth factor signaling and cell adhesion. IGSF10 (immunoglobulin superfamily, member 10), also known as Calvaria mechanical force protein 608 (CMF608), is a 2,623 amino acid secreted protein that contains an N-terminal signal peptide, 6 leucine-rich repeats (LRRs), and 12 immunoglobulin-like repeats. IGSF10 exists as multiple alternatively spliced isoforms, and is expressed in bone. Specifically, expression of IGSF10 is limited to mesenchymal osteochondroprogenitors with fibroblast-like morphology, where it is thought to be involved in the maintenance of the osteochondroprogenitor cells pool and its down-regulation precedes terminal differentiation. The gene encoding IGSF10 maps to chromosome 3q25.1, which comprises over 1,100 genes that include a chemokine receptor gene cluster as well as a variety of human cancer related loci.

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CHROMOSOMAL LOCATION

Genetic locus: Igsf10 (mouse) mapping to 3 D.

PRODUCT

IGSF10 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IGSF10 shRNA Plasmid (m): sc-146186-SH and IGSF10 shRNA (m) Lentiviral Particles: sc-146186-V as alternate gene silencing products.

For independent verification of IGSF10 (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-146186A, sc-146186B and sc-146186C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

IGSF10 siRNA (m) is recommended for the inhibition of IGSF10 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 μ M in 66 μ l. 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 IGSF10 gene expression knockdown using RT-PCR Primer: IGSF10 (m)-PR: sc-146186-PR (20 μ l). 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.