

PF4V1 siRNA (h): sc-106399

BACKGROUND

Chemokines are members of a superfamily of small, inducible, secreted, pro-inflammatory cytokines. Chemokines are chemotactic cytokines that recruit leukocytes to inflammatory sites. Members of the chemokine family exhibit 20% to 50% homology in their predicted amino acid sequences and are divided into four subfamilies. In the CXC or α subfamily, the first two of four cysteine motifs are separated by another amino acid residue. PF4V1 (platelet factor 4 variant 1), also known as is a PF4A, CXCL4L1, CXCL4V1, PF4-ALT or SCYB4V1, is a 104 amino acid secreted protein that belongs to the intercrine α (chemokine CXC) family. PF4V1 is thought to be a highly potent anti-angiogenic and anti-tumor chemokine. It is suggested that PF4V1 and fibroblastin cooperate to inhibit endothelial cell proliferation, migration and tubulogenesis. PF4V1 is encoded by a gene located on human chromosome 4q13.3.

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CHROMOSOMAL LOCATION

Genetic locus: PF4V1 (human) mapping to 4q13.3.

PRODUCT

PF4V1 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PF4V1 shRNA Plasmid (h): sc-106399-SH and PF4V1 shRNA (h) Lentiviral Particles: sc-106399-V as alternate gene silencing products.

For independent verification of PF4V1 (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-106399A and sc-106399B.

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

PF4V1 siRNA (h) is recommended for the inhibition of PF4V1 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 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 PF4V1 gene expression knockdown using RT-PCR Primer: PF4V1 (h)-PR: sc-106399-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.

PROTOCOLS

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