SANTA CRUZ BIOTECHNOLOGY, INC.

CKLF siRNA (h): sc-93286

BACKGROUND

Chemokines are members of a superfamily of small inducible, secreted, pro-inflammatory cytokines. CKLF (chemokine-like factor), also known as C32, is a 152 amino acid protein that likely plays a important role in inflammation and regeneration of skeletal muscle. There are four isoforms of CKLF that are produced as a result of alternative splicing events. All isoforms are expressed at high levels in adult pancreas, spleen, testis, ovary, lung, placenta and peripheral blood leukcocytes, as well as fetal thymus, skeletal muscle, brain and heart. Isoform 1 (CKLF1) is secreted, while isoforms 2 and 4 (CKLF2 and CKLF4) are multi-pass membrane proteins. CKLF1 has a chemotactic response in rat neutrophils, lymphocytes, monocytes and arterial smooth muscle cells. CKLF1 stimulates proliferation of murine skeletal muscle cells and is partly inhibited by IL-10.

REFERENCES

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4. Lou, Y., et al. 2003. Molecular cloning and characterization of rat chemokine-like factor 1 and 2. Gene 307: 125-132.
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CHROMOSOMAL LOCATION

Genetic locus: CKLF (human) mapping to 16q21.

PRODUCT

CKLF siRNA (h) is a target-specific 19-25 nt siRNA 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 CKLF shRNA Plasmid (h): sc-93286-SH and CKLF shRNA (h) Lentiviral Particles: sc-93286-V as alternate gene silencing products.

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

CKLF siRNA (h) is recommended for the inhibition of CKLF 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 CKLF gene expression knockdown using RT-PCR Primer: CKLF (h)-PR: sc-93286-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.