

6CKine siRNA (m): sc-39342

BACKGROUND

6CKine (also designated Exodus-2, SLC, or TCA4) is a member of the chemokine superfamily and the subfamily of CC chemokines that has an aspartate-cysteine-cysteine-leucine motif near its amino terminus. 6CKine has a unique 36 or 37 (murine and human, respectively) amino acid carboxyl-terminal extension that contains six conserved cysteines. 6CKine stimulates the chemotaxis of T lymphocytes and the recruitment and proliferation of activated NK cells. Expression of human 6CKine is restricted to lymph node, spleen and appendix, while murine 6CKine has a broader tissue distribution in spleen and lung. 6CKine is involved in inhibiting hematopoiesis both *in vitro* and *in vivo*. The chemokine family is composed of structurally related proteins that mediate all leukocyte migration. Chemokines stimulate leukocyte infiltration and therefore play crucial roles in many diseases in which there is inflammatory tissue destruction.

REFERENCES

1. Baggiolini, M. and Dahinden, C.A. 1994. CC chemokines in allergic inflammation. *Immunol. Today* 15: 127-133.
2. Hosaka, S., et al. 1994. Expression of the chemokine superfamily in rheumatoid arthritis. *Clin. Exp. Immunol.* 97: 451-457.
3. Kukiela, G.L., et al. 1995. Role of early reperfusion in the induction of adhesion molecules and cytokines in previously ischemic myocardium. *Mol. Cell. Biochem.* 147: 5-12.
4. Furie, M.B. and Randolph, G.J. 1995. Chemokines and tissue injury. *Am. J. Pathol.* 146: 1287-1301.
5. Hedrick, J.A. and Zlotnik, A. 1997. Identification and characterization of a novel β chemokine containing six conserved cysteines. *J. Immunol.* 159: 1589-1593.
6. Hromas, R., et al. 1997. Isolation and characterization of Exodus-2, a novel C-C chemokine with a unique 37-amino acid carboxyl-terminal extension. *J. Immunol.* 159: 2554-2558.
7. Robertson, M.J., et al. 2000. Regulation of human natural killer cell migration and proliferation by the exodus subfamily of CC chemokines. *Cell Immunol.* 199: 8-14.
8. Hromas, R., et al. 2000. The exodus subfamily of CC chemokines inhibits the proliferation of chronic myelogenous leukemia progenitors. *Blood* 95: 1506-1508.

CHROMOSOMAL LOCATION

Genetic locus: Ccl21b (mouse) mapping to 4 A5.

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.

PRODUCT

6CKine 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 6CKine shRNA Plasmid (m): sc-39342-SH and 6CKine shRNA (m) Lentiviral Particles: sc-39342-V as alternate gene silencing products.

For independent verification of 6CKine (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-39342A, sc-39342B and sc-39342C.

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

6CKine siRNA (m) is recommended for the inhibition of 6CKine 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 6CKine gene expression knockdown using RT-PCR Primer: 6CKine (m)-PR: sc-39342-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.