

I-TAC siRNA (m): sc-39355

BACKGROUND

IFN-inducible T cell α chemoattractant (I-TAC), also designated β R1, H174, SCYB9B, Scyb11 (mouse), IP-9 or CXCL11, is a member of the CXC chemokine family and is expressed in IFN- γ -treated astrocytes, monocytes, keratinocytes, bronchial epithelial cells and neutrophils. The gene encoding I-TAC maps to human chromosome 4q21.1. I-TAC and two related proteins, IFN-induced protein of 10 kDa (IP-10) and monokine induced by IFN- γ (MIG), belong to the non-glutamate-leucine-arginine motif CXC chemokine family and act solely through the CXCR-3 receptor for potent attraction of T lymphocytes. I-TAC is assumed to be involved in inflammatory diseases characterized by the presence of activated T cells.

REFERENCES

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5. Albanesi, C., Scarponi, C., Sebastiani, S., Cavani, A., Federici, M., De Pita, O., Puddu, P. and Girolomoni, G. 2000. IL-4 enhances keratinocyte expression of CXCR3 agonistic chemokines. *J. Immunol.* 165: 1395-1402.

CHROMOSOMAL LOCATION

Genetic locus: Cxcl11 (mouse) mapping to 5 E2.

PRODUCT

I-TAC 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 I-TAC shRNA Plasmid (m): sc-39355-SH and I-TAC shRNA (m) Lentiviral Particles: sc-39355-V as alternate gene silencing products.

For independent verification of I-TAC (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-39355A, sc-39355B and sc-39355C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

I-TAC siRNA (m) is recommended for the inhibition of I-TAC 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.

GENE EXPRESSION MONITORING

I-TAC (R-15): sc-74094 is recommended as a control antibody for monitoring of I-TAC gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor I-TAC gene expression knockdown using RT-PCR Primer: I-TAC (m)-PR: sc-39355-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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