SANTA CRUZ BIOTECHNOLOGY, INC.

CCRL2 siRNA (m): sc-142175

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The Power to Question

BACKGROUND

CCRL2 (C-C chemokine receptor-like 2), also known as chemokine receptor X, human chemokine receptor (HCR), CRAM-A or CRAM-B, is a seven pass transmembrane protein expressed by monocytes, neutrophils, and dendritic cells of immunal tissues (predominanly spleen, fetal liver, bone marrow and lymph node). It shares over 40% homology with other C-C chemokine receptors but does not share the conserved DRY motif which is among the important motifs necessary for signalling and ligand-binding. C-C chemokine receptors are G protein-coupled, seven pass transmembrane domain proteins whose major physiological role is to function in the chemotaxis of T cells and phagocytic cells to areas of inflammation. CCRL2 responds to inflammatory chemokines and is upregulated in cells stimulated with lipopolysaccharide (LPS). It may function as a receptor for CCL2, CCL5, CCL7 and CCL8. In addition, CCRL2 may be involved in the pathogenesis of rheumatoid arthritis (RA).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ccrl2 (mouse) mapping to 9 F3.

PRODUCT

CCRL2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see CCRL2 shRNA Plasmid (m): sc-142175-SH and CCRL2 shRNA (m) Lentiviral Particles: sc-142175-V as alternate gene silencing products.

For independent verification of CCRL2 (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-142175A, sc-142175B and sc-142175C.

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

CCRL2 siRNA (m) is recommended for the inhibition of CCRL2 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 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 CCRL2 gene expression knockdown using RT-PCR Primer: CCRL2 (m)-PR: sc-142175-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.