SANTA CRUZ BIOTECHNOLOGY, INC.

CLEC-2H siRNA (m): sc-142384

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The C-type lectin/C-type lectin-like domain superfamily consists of a variety of proteins that share a common protein fold and have diverse functions, including cell-cell signaling, cell adhesion, glycoprotein turnover and immune responses. CLEC-2H (C-type lectin domain family 2, member h), also known as Clrf (C-type lectin-related protein F), is a 218 amino acid single-pass type II membrane protein that functions as a lectin-type cell surface receptor. Containing one C-type lectin domain, CLEC-2H is expressed in kidney, liver, ileum and IL2-activated natural killer cells. The gene encoding CLEC-2H maps to murine chromosome 6 F3, which is located within the natural killer gene complex (NKC).

REFERENCES

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3. Ryan, J.C., et al. 2001. Physiologic functions of activating natural killer (NK) complex-encoded receptors on NK cells. Immunol. Rev. 181: 126-137.
4. Ebner, S., et al. 2003. Evolutionary analysis reveals collective properties and specificity in the C-type lectin and lectin-like domain superfamily. Proteins 53: 44-55.
5. Carninci, P., et al. 2005. The transcriptional landscape of the mammalian genome. Science 309: 1559-1563.
6. Plougastel, B.F., et al. 2006. Extending missing-self? Functional interactions between lectin-like NKrp1 receptors on NK cells with lectin-like ligands. Curr. Top. Microbiol. Immunol. 298: 77-89.
7. Carlyle, J.R., et al. 2006. Molecular and genetic basis for strain-dependent NK1.1 alloreactivity of mouse NK cells. J. Immunol. 176: 7511-7524.

CHROMOSOMAL LOCATION

Genetic locus: Clec2h (mouse) mapping to 6 F3.

PRODUCT

CLEC-2H 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 CLEC-2H shRNA Plasmid (m): sc-142384-SH and CLEC-2H shRNA (m) Lentiviral Particles: sc-142384-V as alternate gene silencing products.

For independent verification of CLEC-2H (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-142384A, sc-142384B and sc-142384C.

PROTOCOLS

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

CLEC-2H siRNA (m) is recommended for the inhibition of CLEC-2H 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 CLEC-2H gene expression knockdown using RT-PCR Primer: CLEC-2H (m)-PR: sc-142384-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.