



CLEC-9A siRNA (h): sc-95810

BACKGROUND

The C-type lectin/C-type lectin-like domain (CTL/CTLD) 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-9A (C-type lectin domain family 9 member A), also known as DNGR1 (dendritic cell natural killer lectin group receptor 1), is a 241 amino acid single-pass type II membrane protein that contains one C-type lectin domain and belongs to the CTL/CTLD superfamily. Expressed in myeloid lineage cells, brain, spleen and thymus, CLEC-9A is a group V C-type lectin-like receptor (CLR) that acts as an activation receptor. The gene encoding CLEC-9A maps to human chromosome 12p13.2 and mouse chromosome 6 F3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CLEC9A (human) mapping to 12p13.2.

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

CLEC-9A siRNA (h) 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 CLEC-9A shRNA Plasmid (h): sc-95810-SH and CLEC-9A shRNA (h) Lentiviral Particles: sc-95810-V as alternate gene silencing products.

For independent verification of CLEC-9A (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-95810A, sc-95810B and sc-95810C.

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

CLEC-9A siRNA (h) is recommended for the inhibition of CLEC-9A 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 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 CLEC-9A gene expression knockdown using RT-PCR Primer: CLEC-9A (h)-PR: sc-95810-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.