

CTRP3 siRNA (m): sc-60298

BACKGROUND

The complement component proteins, C1, C3, C4, and C5, are potent anaphylatoxins that are released during complement activation. Binding of these proteins to their respective G protein-coupled receptors induces proinflammatory events, such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation, and cellular chemotaxis. CTRP3, also designated C1qR(p) or CD93, is a type I cell surface glycoprotein that mediates the enhancement of phagocytic activity. CTRP3 binds to several ligands, including the complement protein C1q, mannose-binding lectin (MBL), and pulmonary surfactant protein A (SPA). CTRP3 is expressed in cells of myeloid lineage, endothelial cells, and platelets. In addition to its role in phagocytosis, CTRP3 may be involved in cellular adhesion. Complement C1q tumor necrosis factor-related protein 3 (CTRP3), also known as CORS26, has a trimeric structure and can assemble into hexameric or higher order molecular forms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C1qtnf3 (mouse) mapping to 15 A1.

PROTOCOLS

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

PRODUCT

CTRP3 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 CTRP3 shRNA Plasmid (m): sc-60298-SH and CTRP3 shRNA (m) Lentiviral Particles: sc-60298-V as alternate gene silencing products.

For independent verification of CTRP3 (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-60298A, sc-60298B and sc-60298C.

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

CTRP3 siRNA (m) is recommended for the inhibition of CTRP3 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 CTRP3 gene expression knockdown using RT-PCR Primer: CTRP3 (m)-PR: sc-60298-PR (20 μ l). 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.