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SRCRB4D siRNA (m): sc-153816

BACKGROUND

Scavenger receptors mediate the endocytosis and degradation of chemically modified low density lipoproteins (LDL), such as acetylated LDL (Ac-LDL) and oxidized LDL (Ox-LDL). SRCRB4D (scavenger receptor cysteine rich domain containing, group B (4 domains)), also known as S4D-SRCRB or SRCRB-S4D, is a 575 amino acid member of the SRCR (scavenger receptor cysteine-rich) superfamily. Members of this superfamily are secreted or cell surface membrane-bound proteins with highly conserved SRCR domains and may play a role in the development and regulation of the immune system and its innate and adaptive responses. SRCRB4D is a widely expressed secreted protein that contains four SRCR domains. SRCRB4D specifically belongs to group B of the SRCR superfamily. Members of group B contain eight evenly spaced cysteines within their SRCR domains that create an intradomain disulfide-bond pattern.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: *Srcrb4d* (mouse) mapping to 5 G2.

PRODUCT

SRCRB4D 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 SRCRB4D shRNA Plasmid (m): sc-153816-SH and SRCRB4D shRNA (m) Lentiviral Particles: sc-153816-V as alternate gene silencing products.

For independent verification of SRCRB4D (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-153816A, sc-153816B and sc-153816C.

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

SRCRB4D siRNA (m) is recommended for the inhibition of SRCRB4D 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 SRCRB4D gene expression knockdown using RT-PCR Primer: SRCRB4D (m)-PR: sc-153816-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.