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Spi9 siRNA (m): sc-153758

BACKGROUND

Serine proteases are enzymes that cleave peptide bonds, specifically at serine residues on target proteins, and are functionally inhibited by serine protease inhibitors (serpins). The serine proteinase inhibitors comprise a superfamily of proteins with a diverse set of functions, including the control of blood coagulation, complement activation, programmed cell death and tissue development. Spi9, also known as Serpinb9d (serine (or cysteine) peptidase inhibitor, clade B, member 9d), AT2 or ovalbumin, is a 377 amino acid murine protein that functions as a serine protease inhibitor and may be involved in various regulatory events throughout the cell. The gene encoding Spi9 maps to mouse chromosome 13.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Serpinb9d (mouse) mapping to 13 A3.3.

PRODUCT

Spi9 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 Spi9 shRNA Plasmid (m): sc-153758-SH and Spi9 shRNA (m) Lentiviral Particles: sc-153758-V as alternate gene silencing products.

For independent verification of Spi9 (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-153758A, sc-153758B and sc-153758C.

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 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

Spi9 siRNA (m) is recommended for the inhibition of Spi9 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 Spi9 gene expression knockdown using RT-PCR Primer: Spi9 (m)-PR: sc-153758-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.