SANTA CRUZ BIOTECHNOLOGY, INC.

SAA4 siRNA (h): sc-96538

BACKGROUND

The serum amyloid A (SAA) protein is an acute phase apolipoprotein reactant produced mainly by hepatocytes and under regulation of inflammatory cytokines. The SAA cleavage product, designated amyloid protein A (AA), is deposited systemically as amyloid in vital organs including the liver, spleen, and kidneys in patients with chronic inflammatory diseases. SAA4 (serum amyloid A-4 protein) is a 130 amino acid protein that belongs to the SAA superfamily. SAA4 shares the same 5' to 3' orientation and has the characteristic four exon structure of the other members of the SAA superfamily. The SAA4 protein is constitutively expressed by the liver and secreted in plasma. The SAA4 gene is conserved in chimpanzee, bovine, mouse and rat, and maps to human chromosome 11p15.1, which is located 9 kb downstream of the SAA2 gene.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: SAA4 (human) mapping to 11p15.1.

PRODUCT

SAA4 siRNA (h) is a pool of 2 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 SAA4 shRNA Plasmid (h): sc-96538-SH and SAA4 shRNA (h) Lentiviral Particles: sc-96538-V as alternate gene silencing products.

For independent verification of SAA4 (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-96538A and sc-96538B.

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

SAA4 siRNA (h) is recommended for the inhibition of SAA4 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 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 SAA4 gene expression knockdown using RT-PCR Primer: SAA4 (h)-PR: sc-96538-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.