

# SAAL1 siRNA (h): sc-96280

## 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. SAAL1 (serum amyloid A-like 1) is a 474 amino acid protein that belongs to the SAAL1 family. SAAL1 is phosphorylated upon DNA damage, probably by Atm or ATR. The SAAL1 gene is conserved in chimpanzee, dog, cow, mouse and zebrafish, and maps to human chromosome 11p15.1. In the mouse genome several amyloid related genes are located in this region which included Saa1l (serum amyloid A-like 1), Saa3 (serum amyloid A 3), Saa4 (serum amyloid A 4), Saa1 (serum amyloid A 1), Saa2 (serum amyloid A 2) and Zdhc13 (zinc finger, DHHC domain containing 13).

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SAAL1 (human) mapping to 11p15.1.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

SAAL1 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SAAL1 shRNA Plasmid (h): sc-96280-SH and SAAL1 shRNA (h) Lentiviral Particles: sc-96280-V as alternate gene silencing products.

For independent verification of SAAL1 (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-96280A, sc-96280B and sc-96280C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

SAAL1 siRNA (h) is recommended for the inhibition of SAAL1 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  $\mu$ M in 66  $\mu$ 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 SAAL1 gene expression knockdown using RT-PCR Primer: SAAL1 (h)-PR: sc-96280-PR (20  $\mu$ 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.