

SAS siRNA (h): sc-95687

BACKGROUND

SAS (sarcoma amplified sequence), also known as TSPAN31 (tetraspanin-31), is a 210 amino acid multi-pass membrane protein that belongs to the tetraspanin (TM4SF) family. Most members of the TM4SF family are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The TM4SF proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. Thought to be involved in growth-related cellular processes, SAS is associated with tumorigenesis and osteosarcoma. Containing six exons spanning approximately 3.2 kb, the SAS gene is conserved in chimpanzee, canine, bovine, mouse, rat and zebrafish, and maps to human chromosome 12q14.1. This chromosomal region is commonly involved in rearrangements in myxoid liposarcoma, benign lipoma and uterine leiomyoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TSPAN31 (human) mapping to 12q14.1.

PRODUCT

SAS 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SAS shRNA Plasmid (h): sc-95687-SH and SAS shRNA (h) Lentiviral Particles: sc-95687-V as alternate gene silencing products.

For independent verification of SAS (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-95687A, sc-95687B and sc-95687C.

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

SAS siRNA (h) is recommended for the inhibition of SAS 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 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 SAS gene expression knockdown using RT-PCR Primer: SAS (h)-PR: sc-95687-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.

PROTOCOLS

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