

AGP-3 siRNA (m): sc-140905

BACKGROUND

AGP (α 1-acid glycoprotein) is an acute phase plasma protein synthesized by the liver. It functions to regulate the interaction between blood cells and endothelial cells, and together with haptoglobin and C reactive protein, it also mediates the extravasation of cells during infection and inflammation. Expression of AGP is induced by acute-phase stimulatory agents such as bacterial lipopolysaccharides. AGP has a high affinity, low capacity binding for basic drugs at physiological pH. In human plasma, AGP is found at levels of 0.5-1.4 mg/ml, though this is elevated during acute inflammation, and, as a result, levels of this protein can be used to diagnose inflammatory conditions. AGP-1 and AGP-2 contain five and six potential N-glycosylation sites, respectively. Abnormal expression of the AGP-1 gene is linked to sarcoidosis and other immunogenetic diseases, while mutations in the AGP-2 gene are associated with different types of carcinomas.

CHROMOSOMAL LOCATION

Genetic locus: Orm3 (mouse) mapping to 4 C1.

PRODUCT

AGP-3 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see AGP-3 shRNA Plasmid (m): sc-140905-SH and AGP-3 shRNA (m) Lentiviral Particles: sc-140905-V as alternate gene silencing products.

For independent verification of AGP-3 (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-140905A and sc-140905B.

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

AGP-3 siRNA (m) is recommended for the inhibition of AGP-3 expression in mouse cells.

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.

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 AGP-3 gene expression knockdown using RT-PCR Primer: AGP-3 (m)-PR: sc-140905-PR (20 μ l). Annealing temperature for the primers should be $55-60^{\circ}$ C and the extension temperature should be $68-72^{\circ}$ C.