

apoL-VI siRNA (h): sc-72522

BACKGROUND

The apolipoprotein L gene family maps to a region on chromosome 22 and encodes six highly homologous proteins designated apoL-I, apoL-II, apoL-III, apoL-IV, apoL-V and apoL-VI, all of which function as components of plasma lipoproteins. ApoL-VI (apolipoprotein L-VI), also known as APOL6, is a 343 amino acid protein that localizes to the cytoplasm and belongs to the apolipoprotein L family. Expressed in a variety of tissues including liver, heart, uterus, spleen, colon, spinal cord, placenta, prostate and mammary gland, apoL-VI is thought to affect the movement of lipids in the cytoplasm and may allow the binding of lipids to organelles. Overproduction of apoL-VI induces apoptosis, suggesting that apoL-VI may also be involved in tumor progression. Like other members of the apolipoprotein L family, apoL-VI is thought to be involved in the development of schizophrenia.

REFERENCES

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- Mimmack, M.L., et al. 2002. Gene expression analysis in schizophrenia: reproducible up-regulation of several members of the apolipoprotein L family located in a high-susceptibility locus for schizophrenia on chromosome 22. *Proc. Natl. Acad. Sci. USA* 99: 4680-4685.
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CHROMOSOMAL LOCATION

Genetic locus: APOL6 (human) mapping to 22q12.3.

PRODUCT

apoL-VI 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 apoL-VI shRNA Plasmid (h): sc-72522-SH and apoL-VI shRNA (h) Lentiviral Particles: sc-72522-V as alternate gene silencing products.

For independent verification of apoL-VI (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-72522A, sc-72522B and sc-72522C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

apoL-VI siRNA (h) is recommended for the inhibition of apoL-VI 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 apoL-VI gene expression knockdown using RT-PCR Primer: apoL-VI (h)-PR: sc-72522-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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