



Sidekick-1 siRNA (m): sc-153459

BACKGROUND

Cell adhesion molecules influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. Sidekick-1 (SDK1) is a 2,213 amino acid single-pass membrane protein that functions as a cell adhesion molecule by guiding axonal terminals to specific synapses in developing neurons. Existing as three alternatively spliced isoforms, Sidekick-1 is expressed in retinal neurons and contains 13 fibronectin type-III domains and 6 Ig-like C2-type (immunoglobulin-like) domains. Sidekick-1 expression is upregulated in glomeruli of patients with HIV-associated nephropathy, where it leads to podocyte dysfunction. The gene encoding Sidekick-1 maps to human chromosome 7p22.2 and murine chromosome 5 G2.

REFERENCES

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6. Oguri, M., Kato, K., Yokoi, K., Yoshida, T., Watanabe, S., Metoki, N., Yoshida, H., Satoh, K., Aoyagi, Y., Nozawa, Y. and Yamada, Y. 2010. Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. *Am. J. Hypertens.* 23: 70-77.
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CHROMOSOMAL LOCATION

Genetic locus: Sdk1 (mouse) mapping to 5 G2.

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.

PRODUCT

Sidekick-1 siRNA (m) 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 Sidekick-1 shRNA Plasmid (m): sc-153459-SH and Sidekick-1 shRNA (m) Lentiviral Particles: sc-153459-V as alternate gene silencing products.

For independent verification of Sidekick-1 (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-153459A, sc-153459B and sc-153459C.

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

Sidekick-1 siRNA (m) is recommended for the inhibition of Sidekick-1 expression in mouse 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 Sidekick-1 gene expression knockdown using RT-PCR Primer: Sidekick-1 (m)-PR: sc-153459-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.