

Sidekick-1 siRNA (h): sc-89632

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 (human) mapping to 7p22.2.

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 (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 Sidekick-1 shRNA Plasmid (h): sc-89632-SH and Sidekick-1 shRNA (h) Lentiviral Particles: sc-89632-V as alternate gene silencing products.

For independent verification of Sidekick-1 (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-89632A, sc-89632B and sc-89632C.

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 (h) is recommended for the inhibition of Sidekick-1 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 Sidekick-1 gene expression knockdown using RT-PCR Primer: Sidekick-1 (h)-PR: sc-89632-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.