

11 β -HSD1L siRNA (h): sc-97222

BACKGROUND

11 β -HSD1, a low-affinity NADP-dependent dehydrogenase/oxoreductase, activates cortisol from cortisone and may also play a role in glucose homeostasis and in the pathogenesis of a number of disorders, such as Insulin resistance, obesity and cancer. 11 β -HSD1L (hydroxysteroid (11- β) dehydrogenase 1-like), also known as HSD3, HSD11B1L or SCDR10, is a 315 amino acid secreted protein that belongs to the short-chain dehydrogenases/reductases (SDR) family and is thought to function in a similar manner as 11 β -HSD1. Due to its similarity with 11 β -HSD1, 11 β -HSD1L may be involved in glucose regulation and in the development of glucose-related disease. Eight isoforms of 11 β -HSD1L exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HSD11B1L (human) mapping to 19p13.3.

PRODUCT

11 β -HSD1L siRNA (h) 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 11 β -HSD1L shRNA Plasmid (h): sc-97222-SH and 11 β -HSD1L shRNA (h) Lentiviral Particles: sc-97222-V as alternate gene silencing products.

For independent verification of 11 β -HSD1L (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-97222A and sc-97222B.

PROTOCOLS

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

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

11 β -HSD1L siRNA (h) is recommended for the inhibition of 11 β -HSD1L 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 11 β -HSD1L gene expression knockdown using RT-PCR Primer: 11 β -HSD1L (h)-PR: sc-97222-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.