

SULT1C4 siRNA (h): sc-94685

BACKGROUND

The soluble sulfotransferases contribute to the elimination of xenobiotics, the activation of procarcinogens and the regulation of hormones by catalyzing the sulfate conjugation of these substances. Members of the three groups comprising this superfamily (namely SULT1, SULT2 and SULT3) show selectivity to certain substrate compounds. SULT1C4 (sulfotransferase 1C4), also known as sulfotransferase 1C2, is a 302 amino acid protein belonging to the SULT1 family. Along with catalyzing the sulfate conjugation of many drugs and hormones, SULT1C4 also may play a role in the activation of carcinogenic hydroxylamines. SULT1C4 has been found to show activity towards p-nitrophenol and N-hydroxy-2-acetylaminofluorene. Localized to the cytoplasm, SULT1C4 is expressed at high levels in fetal kidney and lung.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SULT1C4 (human) mapping to 2q12.3.

PRODUCT

SULT1C4 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 SULT1C4 shRNA Plasmid (h): sc-94685-SH and SULT1C4 shRNA (h) Lentiviral Particles: sc-94685-V as alternate gene silencing products.

For independent verification of SULT1C4 (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-94685A, sc-94685B and sc-94685C.

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

SULT1C4 siRNA (h) is recommended for the inhibition of SULT1C4 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 SULT1C4 gene expression knockdown using RT-PCR Primer: SULT1C4 (h)-PR: sc-94685-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.