

ZNF394 siRNA (h): sc-89763

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. As a member of the Krüppel C₂H₂-type zinc-finger protein family, ZNF394 (zinc finger protein 394), also known as Zinc finger and SCAN domain-containing protein 14 (ZKSCAN14), is a 561 amino acid transcriptional regulator. ZNF394 localizes to the nucleus and is specifically expressed in heart, skeletal muscle and brain in human adult tissues. ZNF394 contains seven C₂H₂-type zinc fingers, a SCAN domain and a KRAB domain. ZNF394 functions as a transcriptional repressor for the c-Jun transcription factor, suggesting that ZNF394 is a new transcriptional repressor in mitogen-activated protein kinase signaling pathways. Additionally, ZNF394 may play an important role in cell growth and proliferation signaling pathways.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZNF394 (human) mapping to 7q22.1.

PROTOCOLS

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

PRODUCT

ZNF394 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZNF394 shRNA Plasmid (h): sc-89763-SH and ZNF394 shRNA (h) Lentiviral Particles: sc-89763-V as alternate gene silencing products.

For independent verification of ZNF394 (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-89763A, sc-89763B and sc-89763C.

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 µl of the RNase-free water provided. Resuspension of the siRNA duplex in 330 µl of RNase-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

ZNF394 siRNA (h) is recommended for the inhibition of ZNF394 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 µM in 66 µl. 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 ZNF394 gene expression knockdown using RT-PCR Primer: ZNF394 (h)-PR: sc-89763-PR (20 µl). 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.