

ZNF323 siRNA (h): sc-95135

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, ZNF323 (zinc finger protein 323) is a 406 amino acid protein containing six C₂H₂-type zinc fingers and one SCAN box domain. Specifically, C₂H₂-type zinc fingers function to bind DNA, while SCAN box domains are thought to participate in protein-protein interactions. Therefore, it is probable that ZNF323 functions as a transcription factor. With highest expression in kidney, liver and lung and weaker expression in brain, heart, intestine, muscle, cholecyst and pancreas, ZNF323 is localized to the nucleus. It is also suggested that ZNF323 may play a role in the development of multiple embryonic organs.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZSCAN31 (human) mapping to 6p22.1.

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

ZNF323 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 ZNF323 shRNA Plasmid (h): sc-95135-SH and ZNF323 shRNA (h) Lentiviral Particles: sc-95135-V as alternate gene silencing products.

For independent verification of ZNF323 (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-95135A, sc-95135B and sc-95135C.

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

ZNF323 siRNA (h) is recommended for the inhibition of ZNF323 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 ZNF323 gene expression knockdown using RT-PCR Primer: ZNF323 (h)-PR: sc-95135-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.