ZNF274 siRNA (h): sc-97328



The Power to Question

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. A member of the Krüppel $\rm C_2H_2$ -type zinc-finger protein family, ZNF274, also known as zinc finger protein with KRAB and SCAN domains 19, is a 653 amino acid protein containing 5 $\rm C_2H_2$ -type zinc fingers, two KRAB A domains and one SCAN box domain. Predominantly localized to the nucleolus, ZNF274 exhibits transcriptional repressing activity. There are four isoforms of ZNF274 that are produced as a result of alternative splicing events. Although total ZNF274 expression seems to be ubiquitous, the two main isoforms, ZNF274a and ZNF274b, differ slightly in tissue distribution with higher expression of ZNF274a in testis and higher expression of ZNF274b in spleen, ovary, skeletal muscle and thymus.

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CHROMOSOMAL LOCATION

Genetic locus: ZNF274 (human) mapping to 19q13.43.

PRODUCT

ZNF274 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 ZNF274 shRNA Plasmid (h): sc-97328-SH and ZNF274 shRNA (h) Lentiviral Particles: sc-97328-V as alternate gene silencing products.

For independent verification of ZNF274 (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-97328A, sc-97328B and sc-97328C.

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

ZNF274 siRNA (h) is recommended for the inhibition of ZNF274 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.

PROTOCOLS

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

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