SANTA CRUZ BIOTECHNOLOGY, INC.

ZKSCAN5 siRNA (h): sc-89452

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 C_2H_2-type zinc-finger protein family, ZKSCAN5, also known as ZFP95, is a 839 amino acid protein containing 13 C_2H_2-type zinc fingers, one KRAB A domain and one SCAN box domain. ZKSCAN5 is located in the nucleus and is highly expressed in testis with lower levels of expression in liver, kidney, brain, striated muscle, lung and heart. Many KRAB A box-containing proteins have been shown to function as transcription repressors, suggesting a possible function of ZKSCAN5. As a result of alternative splicing, three transcripts of ZKSCAN5 exist, however one of those transcripts is specific to testis. The mouse homolog of ZKSCAN5 is differentially expressed in spermatogenesis.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: ZKSCAN5 (human) mapping to 7q22.1.

PRODUCT

ZKSCAN5 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 ZKSCAN5 shRNA Plasmid (h): sc-89452-SH and ZKSCAN5 shRNA (h) Lentiviral Particles: sc-89452-V as alternate gene silencing products.

For independent verification of ZKSCAN5 (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-89452A, sc-89452B and sc-89452C.

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

ZKSCAN5 siRNA (h) is recommended for the inhibition of ZKSCAN5 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 ZKSCAN5 gene expression knockdown using RT-PCR Primer: ZKSCAN5 (h)-PR: sc-89452-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.