

ZKSCAN2 siRNA (m): sc-155624

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 C₂H₂-type zinc-finger protein family, ZKSCAN2, also known as ZNF694, is a 967 amino acid nuclear protein containing six C₂H₂-type zinc fingers, one KRAB A domain and one SCAN box domain. Like many other KRAB A box-containing proteins, ZKSCAN2 is suggested to function as a transcriptional repressor. As a result of alternative splicing, two transcripts of ZKSCAN2 exist. The gene encoding ZKSCAN2 maps to human chromosome 16p12.1, which encodes over 900 genes and comprises nearly 3% of the human genome. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Zkscan2 (mouse) mapping to 7 F3.

PRODUCT

ZKSCAN2 siRNA (m) is a target-specific 19-25 nt siRNA 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 ZKSCAN2 shRNA Plasmid (m): sc-155624-SH and ZKSCAN2 shRNA (m) Lentiviral Particles: sc-155624-V as alternate gene silencing 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 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

ZKSCAN2 siRNA (m) is recommended for the inhibition of ZKSCAN2 expression in mouse 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 ZKSCAN2 gene expression knockdown using RT-PCR Primer: ZKSCAN2 (m)-PR: sc-155624-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.