

ZFP51 siRNA (m): sc-155561

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. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZFP51 (zinc finger protein 51) is a 781 amino acid mouse protein encoded by a gene mapping to chromosome 17 A3.2. The human homolog to ZFP51, known as ZNF761 (zinc finger protein 761), is a nuclear proteins that belongs to the Krüppel C₂H₂-type zinc-finger protein family. ZNF761 is likely involved in transcriptional regulation and is encoded by a gene located on human chromosome 19q13.42. Human chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is the genetic home for a number of immunoglobulin (Ig) superfamily members, a number of ICAMs, the CEACAM and PSG families, and Fc receptors (FcRs).

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Zfp51 (mouse) mapping to 17 A3.2.

PRODUCT

ZFP51 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZFP51 shRNA Plasmid (m): sc-155561-SH and ZFP51 shRNA (m) Lentiviral Particles: sc-155561-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 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

ZFP51 siRNA (m) is recommended for the inhibition of ZFP51 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 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 ZFP51 gene expression knockdown using RT-PCR Primer: ZFP51 (m)-PR: sc-155561-PR (20 μ l). 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.