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# 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 C<sub>2</sub>H<sub>2</sub>-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).

## REFERENCES

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## PROTOCOLS

See our web site at [www.scbt.com](http://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  $\mu$ 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ 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  $\mu$ M in 66  $\mu$ 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  $\mu$ 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.