

ZFP3 siRNA (m): sc-155544

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. ZFP3 (zinc finger protein 3), also known as Zfp-3 or ZNF752, is a 502 amino acid zinc-finger protein that belongs to the Kruppel C₂H₂-type zinc finger family. Localized to the nucleus, ZFP3 contains 13 C₂H₂-type zinc fingers and is thought to play a role in transcriptional regulation.

REFERENCES

1. Ashworth, A., Williams, B.P., Buchberg, A.M., Goodfellow, P.N., Solomon, E., Potter, J. and Willison, K.R. 1989. Chromosomal localization of zinc finger protein genes in man and mouse. *Genomics* 4: 323-327.
2. Rousseau-Merck, M.F., Huebner, K., Berger, R. and Thiesen, H.J. 1991. Chromosomal localization of two human zinc finger protein genes, ZNF24 (KDX17) and ZNF29 (KDX26), to 18q12 and 17p13-p12, respectively. *Genomics* 9: 154-161.
3. McGinnis, J.F., Austin, B., Klisak, I., Heinzmann, C., Kojis, T., Sparkes, R.S., Bateman, J.B. and Lerious, V. 1995. Chromosomal assignment of the human gene for the cancer-associated retinopathy protein (recoverin) to chromosome 17p13.1. *J. Neurosci. Res.* 40: 165-168.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 194480. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Zfp3 (mouse) mapping to 11 B3.

PRODUCT

ZFP3 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 ZFP3 shRNA Plasmid (m): sc-155544-SH and ZFP3 shRNA (m) Lentiviral Particles: sc-155544-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.

PROTOCOLS

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

APPLICATIONS

ZFP3 siRNA (m) is recommended for the inhibition of ZFP3 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 ZFP3 gene expression knockdown using RT-PCR Primer: ZFP3 (m)-PR: sc-155544-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.