

ZNF483 siRNA (m): sc-155726

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. As a member of the Krüppel C₂H₂-type zinc-finger protein family, ZNF483 (zinc finger protein 483) also known as SCAN domains 16, is a 744 nuclear protein containing 11 C₂H₂-type zinc fingers, one KRAB domain, and one SCAN box domain. Like other zinc-fingers, ZNF483 is suggested to be involved in transcriptional regulation. The gene encoding ZNF486 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

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3. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. *Nat. Genet.* 36: 40-45.
4. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
5. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
6. Huang, G., et al. 2005. ZNF217 suppresses cell death associated with chemotherapy and telomere dysfunction. *Hum. Mol. Genet.* 14: 3219-3225.
7. Sarraf, S., et al. 2005. The human ovarian teratocarcinoma cell line PA-1 demonstrates a single translocation: analysis with fluorescence *in situ* hybridization, spectral karyotyping, and bacterial artificial chromosome microarray. *Cancer Genet. Cytogenet.* 161: 63-69.

CHROMOSOMAL LOCATION

Genetic locus: Zkscan16 (mouse) mapping to 4 B3.

PRODUCT

ZNF483 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 ZNF483 shRNA Plasmid (m): sc-155726-SH and ZNF483 shRNA (m) Lentiviral Particles: sc-155726-V as alternate gene silencing products.

PROTOCOLS

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

ZNF483 siRNA (m) is recommended for the inhibition of ZNF483 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 ZNF483 gene expression knockdown using RT-PCR Primer: ZNF483 (m)-PR: sc-155726-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.