

▶ TEX19.1 siRNA (m): sc-154217

BACKGROUND

TEX19.1 (testis expressed gene 19.1), also known as Tex19a or Tex19, is a 351 amino acid mouse protein that localizes to the nucleus and, in addition to its expression in testis, placenta and ovary, is also present during early embryogenesis, suggesting an involvement in fetal development and maturation. Additionally, TEX19.1 may also play a role in the repression of transposable genetic elements and in the maintenance of genomic stability through successive generations. Defects or deletions in the gene encoding TEX19.1 are associated with defective spermatogenesis and activation of endogenous rodent retroviruses, further supporting the importance of TEX19.1 in proper embryonic development.

REFERENCES

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3. de Rooij, D.G. and de Boer, P. 2003. Specific arrests of spermatogenesis in genetically modified and mutant mice. *Cytogenet. Genome Res.* 103: 267-276.
4. Surani, M.A., Hayashi, K. and Hajkova, P. 2007. Genetic and epigenetic regulators of pluripotency. *Cell* 128: 747-762.
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CHROMOSOMAL LOCATION

Genetic locus: Tex19.1 (mouse) mapping to 11 E2.

PRODUCT

TEX19.1 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs 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 TEX19.1 shRNA Plasmid (m): sc-154217-SH and TEX19.1 shRNA (m) Lentiviral Particles: sc-154217-V as alternate gene silencing products.

For independent verification of TEX19.1 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154217A, sc-154217B and sc-154217C.

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

TEX19.1 siRNA (m) is recommended for the inhibition of TEX19.1 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 TEX19.1 gene expression knockdown using RT-PCR Primer: TEX19.1 (m)-PR: sc-154217-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.

PROTOCOLS

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