SANTA CRUZ BIOTECHNOLOGY, INC.

Sox-15 siRNA (m): sc-38428

BACKGROUND

Sox-15 (SRY (sex determining region Y)-box 20, SRY-box 15, SOX26, SOX27) encodes a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of the cell fate. Sox-15 may act as a transcriptional regulator after forming a protein complex with other proteins. Sox-15 is widely expressed in fetal and adult tissues with highest level found in fetal spinal cord, adult brain and adult testis. Sox family transcription factors influence cell differentiation, development, and sex determination. Sox-15 contains a unique DNA binding domain known as the high mobility group (HMG) box that is related to that of the testis determining gene SRY. The highly complex group of Sox genes cluster at a minimum of 40 different loci that rapidly diverged in various animal lineages. Several Sox genes have been identified, and members of this family have been shown to be conserved during evolution and to play key roles during animal development.

REFERENCES

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3. Kuhlbrodt, K., et al. 1998. Sox10, a novel transcriptional modulator in glial cells. J. Neurosci. 18: 237-250.
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5. Arsic, N., et al. 1998. Characterisation and mapping of the human SOX14 gene. Cytogenet. Cell Genet. 83: 139-146.
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8. Osaki, E., et al. 1999. Identification of a novel Sry-related gene and its germ cell-specific expression. Nucleic Acids Res. 27: 2503-2510.
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CHROMOSOMAL LOCATION

Genetic locus: Sox15 (mouse) mapping to 11 B3.

PRODUCT

Sox-15 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 Sox-15 shRNA Plasmid (m): sc-38428-SH and Sox-15 shRNA (m) Lentiviral Particles: sc-38428-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.

APPLICATIONS

Sox-15 siRNA (m) is recommended for the inhibition of Sox-15 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 Sox-15 gene expression knockdown using RT-PCR Primer: Sox-15 (m)-PR: sc-38428-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.

PROTOCOLS

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