SANTA CRUZ BIOTECHNOLOGY, INC.

TGIF2LY siRNA (h): sc-91539

BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species. It also functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and control of gene expression. TGIF2LY (TGFB-induced factor homeobox 2-like, Y-linked), also known as TGIFLY, is a 185 amino acid testis-specific nuclear protein that functions as a transcriptional regulator during spermatid maturation. TGIF2LY belongs to the TALE/TGIF homeobox family and contains one homeobox DNA-binding domain. The gene encoding TGIF2LY maps within a male specific region of chromosome Y, in a region implied to form following a large X-to-Y transposition. The C-terminal region of TGIF2LY differs from the C-terminal region of its chromosome X homolog TGIF2LX, which suggests that TGIF2LY may act as a competitor or regulator of TGIF2LX.

REFERENCES

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5. Ousati Ashtiani, Z., Ayati, M., Modarresi, M.H., Raoofian, R., Sabah Goulian, B., Greene, W.K. and Heidari, M. 2009. Association of TGIFLX/Y mRNA expression with prostate cancer. Med. Oncol. 26: 73-77.

CHROMOSOMAL LOCATION

Genetic locus: TGIF2LY (human) mapping to Yp11.2.

PRODUCT

TGIF2LY siRNA (h) 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 TGIF2LY shRNA Plasmid (h): sc-91539-SH and TGIF2LY shRNA (h) Lentiviral Particles: sc-91539-V as alternate gene silencing products.

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.

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

TGIF2LY siRNA (h) is recommended for the inhibition of TGIF2LY expression in human 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 TGIF2LY gene expression knockdown using RT-PCR Primer: TGIF2LY (h)-PR: sc-91539-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.