SANTA CRUZ BIOTECHNOLOGY, INC.

TCEAL7 siRNA (h): sc-91253

BACKGROUND

TCEAL7 (transcription elongation factor A protein-like 7), also known as transcription elongation factor S-II protein-like 7, is a 100 amino acid nuclear protein that belongs to the TFS-II family and the TFA subfamily.While highly expressed in normal and fetal brain tissues, TCEAL7 is weakly expressed in uterus and ovary. In addition, TCEAL7 is down-regulated in epithelial ovarian, cervical, prostate, breast, brain and lung cancer cell lines and in brain and ovarian tumors. TCEAL7 plays a role in the negative regulation of NFκB signaling at the basal level by modulating transcriptional activity of NFκB on its target gene promoters. Associating with cyclin D1 promoter containing Myc E-box sequence, TCEAL7 transcriptionally represses cyclin D1 expression. Acting in both ALT (alternative lengthening of telomeres) and telomerase-positive cell lines, TCEAL7 regulates telomerase reverse transcriptase expression and telomerase activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TCEAL7 (human) mapping to Xq22.1.

PROTOCOLS

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

PRODUCT

TCEAL7 siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TCEAL7 shRNA Plasmid (h): sc-91253-SH and TCEAL7 shRNA (h) Lentiviral Particles: sc-91253-V as alternate gene silencing products.

For independent verification of TCEAL7 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-91253A, sc-91253B and sc-91253C.

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

TCEAL7 siRNA (h) is recommended for the inhibition of TCEAL7 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 TCEAL7 gene expression knockdown using RT-PCR Primer: TCEAL7 (h)-PR: sc-91253-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.