SANTA CRUZ BIOTECHNOLOGY, INC.

LBP-9 siRNA (h): sc-60924

BACKGROUND

The long terminal repeat binding protein-1 (LBP-1) mammalian family of transcription factors are proteins that stimulate transcription in HeLa cells from the major late promoter of simian virus 40 *in vitro*. The two related human LBP-1 genes are TFCP2A, which encodes the alternatively spliced transcripts LBP-1a and LBP-1b, and TFCP2C, which encodes LBP-1c and LBP-1d. LBP-9, also designated transcription factor CP2-like 1 (TFCP2L1), is a protein of 479 amino acids. LBP-9 shows 83% sequence homology with LBP-1b and acts as a suppressor factor inhibiting the stimulation effect of LBP-1b. LBP-9 may regulate the P450scc reporter activity through the -155/-131 element.

REFERENCES

1. Mukhamadieva, G.A. 1975. Functional state of the stomach in patients with diffuse toxic goiter and hypothyroidism. Vrach. Delo 6: 22-25.
2. Yoon, J.B., et al. 1994. Characterization of a family of related cellular transcription factors which can modulate human immunodeficiency virus type 1 transcription *in vitro*. Mol. Cell. Biol. 14: 1776-1785.
3. Huang, N. and Miller, W.L. 2000. Cloning of factors related to HIV-inducible LBP proteins that regulate steroidogenic factor-1-independent human placental transcription of the cholesterol side-chain cleavage enzyme, P450scc. J. Biol. Chem. 275: 2852-2858.
4. Rodda, S., et al. 2001. CRTR-1, a developmentally regulated transcriptional repressor related to the CP2 family of transcription factors. J. Biol. Chem. 276: 3324-3332.
5. Huang, N. and Miller, W.L. 2005. LBP proteins modulate SF1-independent expression of P450scc in human placental JEG-3 cells. Mol. Endocrinol. 19: 409-420.
6. Sato, F., et al. 2005. Heterodimerization with LBP-1b is necessary for nuclear localization of LBP-1a and LBP-1c. Genes Cells 10: 861-870.

CHROMOSOMAL LOCATION

Genetic locus: TFCP2L1 (human) mapping to 2q14.2.

PRODUCT

LBP-9 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 LBP-9 shRNA Plasmid (h): sc-60924-SH and LBP-9 shRNA (h) Lentiviral Particles: sc-60924-V as alternate gene silencing products.

For independent verification of LBP-9 (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-60924A, sc-60924B and sc-60924C.

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

LBP-9 siRNA (h) is recommended for the inhibition of LBP-9 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 LBP-9 gene expression knockdown using RT-PCR Primer: LBP-9 (h)-PR: sc-60924-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.