SANTA CRUZ BIOTECHNOLOGY, INC.

SLIRP siRNA (m): sc-106554

BACKGROUND

SLIRP (SRA stem-loop-interacting RNA-binding protein), also known as DC50 or C14orf156, is a 109 amino acid mitochondrial protein that localizes to the nucleus and is ubiquitously expressed, with highest levels in heart, liver, skeletal muscle and testis. Containing a single RRM (RNA recognition motif) domain, SLIRP acts as a nuclear receptor corepressor and binds the STR7 loop of SRA RNA. In addition to repressing the SRA-mediated nuclear receptor coactivation, SLIRP is also able to repress glucocorticoid (GR), androgen (AR), thyroid (TR) and VDR-mediated transactivation. It is suggested that SLIRP may regulate mitochondrial function and augment the effect of Tamoxifen, a drug that acts as an antagonist of the estrogen receptor and inhibits receptor activity. The gene encoding SLIRP is located on human chromsome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Slirp (mouse) mapping to 12 D2.

PROTOCOLS

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

PRODUCT

SLIRP 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 SLIRP shRNA Plasmid (m): sc-106554-SH and SLIRP shRNA (m) Lentiviral Particles: sc-106554-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

SLIRP siRNA (m) is recommended for the inhibition of SLIRP 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.

GENE EXPRESSION MONITORING

SLIRP (B-12): sc-514508 is recommended as a control antibody for monitoring of SLIRP gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RESEARCH USE

For research use only, not for use in diagnostic procedures.