SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L37a siRNA (h): sc-94617

BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein L37a, also known as RPL37a, is a 92 amino acid protein that localizes to the cytoplasm and exists as a component of the 60S subunit, possibly playing a role in protein translation. Like most ribosomal proteins, Ribosomal Protein L37a exists as multiple processed pseudogenes that are scattered throughout the genome. The gene encoding Ribosomal Protein L31 maps to human chromosome 2, which consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome.

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CHROMOSOMAL LOCATION

Genetic locus: RPL37A (human) mapping to 2q35.

PRODUCT

Ribosomal Protein L37a siRNA (h) is a pool of 2 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 Ribosomal Protein L37a shRNA Plasmid (h): sc-94617-SH and Ribosomal Protein L37a shRNA (h) Lentiviral Particles: sc-94617-V as alternate gene silencing products.

For independent verification of Ribosomal Protein L37a (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-94617A and sc-94617B.

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

Ribosomal Protein L37a siRNA (h) is recommended for the inhibition of Ribosomal Protein L37a 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.

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.