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SANTA CRUZ BIOTECHNOLOGY, INC.

Nup37 siRNA (m): sc-150123

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Nup37 is a 326 amino acid nuclear protein that contains four WD repeats and is a component of the Nup107-160 subcomplex of the nuclear pore complex (NPC). Aside from Nup37, the Nup107-160 subcomplex includes Nup160, Nup133, Nup107, Nup98, Pericentrin 1, Nup43, Seh1 and SEC13. The Nup107-160 subcomplex is required for the assembly of a functional NPC, and is also required for normal kinetochore microtubule attachment, mitotic progression and chromosome segregation. The gene that encodes Nup37 consists of around 44,392 bases and maps to human chromosome 12q23.2. Encoding over 1,100 genes, chromosome 12 comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

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CHROMOSOMAL LOCATION

Genetic locus: Nup37 (mouse) mapping to 10 C1.

PRODUCT

Nup37 siRNA (m) 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 Nup37 shRNA Plasmid (m): sc-150123-SH and Nup37 shRNA (m) Lentiviral Particles: sc-150123-V as alternate gene silencing products.

For independent verification of Nup37 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-150123A, sc-150123B and sc-150123C.

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

Nup37 siRNA (m) is recommended for the inhibition of Nup37 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Nup37 gene expression knockdown using RT-PCR Primer: Nup37 (m)-PR: sc-150123-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.