SANTA CRUZ BIOTECHNOLOGY, INC.

GON4L siRNA (h): sc-88827

BACKGROUND

GON4L is a 2,241 amino acid transcription factor with a retrovirus derived DNA-binding domain called SANT, also known as Myb-like domain, at the C-terminus. GON4L is also composed of two PAH (paired amphipathic helix) repeats, and two phosphorylation sites. These evolutionary conserved motifs are shared by vertebrates, *Drosophila melanogaster, Caenorhabditis elegans, Dictyostelium discoideum* and plants such as *Arabidopsis thaliana* and *Oryza sativa*. The expression of the GON4L gene is regulated by an alternative termination of transcription in intron 21 which results in two isoforms. GON4La is the full-length transcript, whereas GON4Lb is the truncated form consisting of 1,539 amino acids. Both alternatively spliced products are ubiquitously expressed at varying levels in normal human tissues and may play a critical role in cell cycle control.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GON4L (human) mapping to 1q22.

PRODUCT

GON4L 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 GON4L shRNA Plasmid (h): sc-88827-SH and GON4L shRNA (h) Lentiviral Particles: sc-88827-V as alternate gene silencing products.

For independent verification of GON4L (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-88827A, sc-88827B and sc-88827C.

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

GON4L siRNA (h) is recommended for the inhibition of GON4L 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 GON4L gene expression knockdown using RT-PCR Primer: GON4L (h)-PR: sc-88827-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.

PROTOCOLS

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