

Repetin siRNA (h): sc-88601

BACKGROUND

Repetin (RPTN) is a 784 amino acid secreted protein that belongs to the S100-fused protein family. Repetin is an extracellular epidermal matrix protein that is expressed in the epidermis and at high levels in eccrine sweat glands, the inner sheaths of hair roots and the filiform papilli of the tongue. A multifunctional epidermal matrix protein, Repetin is involved in the cornified cell envelope formation. Containing two EF-hand domains, the recombinant N-terminal domain of Repetin binds calcium reversibly. Repetin and trichohyalin may compensate for absent loricrin. The Repetin gene contains three exons, two introns and spans at least 5.6 kb. The Repetin gene is conserved in bovine, mouse and rat.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RPTN (human) mapping to 1q21.3.

PRODUCT

Repetin 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Repetin shRNA Plasmid (h): sc-88601-SH and Repetin shRNA (h) Lentiviral Particles: sc-88601-V as alternate gene silencing products.

For independent verification of Repetin (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-88601A, sc-88601B and sc-88601C.

RESEARCH USE

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

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Repetin siRNA (h) is recommended for the inhibition of Repetin 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 μ M in 66 μ l. 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 Repetin gene expression knockdown using RT-PCR Primer: Repetin (h)-PR: sc-88601-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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