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Keratin 24 siRNA (m): sc-146405

BACKGROUND

The Keratin multigene family is made of the "soft" epithelial cytokeratins and the "hard" hair Keratins. While the epithelial cytokeratins are involved in the layering and formation of epithelia, the hair Keratins are responsible for creating nails and hair. There are two types of hair Keratins: the acidic type I hair Keratin proteins and the basic/neutral type II hair Keratin proteins. Keratin 24 (Keratin, type I cytoskeletal 24), also known as KRT24 or CK-24, is a 525 amino acid protein belonging to the type I (acidic) keratin family. Existing as a heterotetramer of two type I and two type II Keratins, Keratin 24 is highly expressed in keratinocytes, placenta, colon and spleen, and is upregulated in the mucosa of colorectal cancer patients. The gene encoding Keratin 24 maps to human chromosome 17q21.2 and mouse chromosome 11 D.

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CHROMOSOMAL LOCATION

Genetic locus: Krt24 (mouse) mapping to 11 D.

RESEARCH USE

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

PRODUCT

Keratin 24 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Keratin 24 shRNA Plasmid (m): sc-146405-SH and Keratin 24 shRNA (m) Lentiviral Particles: sc-146405-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 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

Keratin 24 siRNA (m) is recommended for the inhibition of Keratin 24 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 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 Keratin 24 gene expression knockdown using RT-PCR Primer: Keratin 24 (m)-PR: sc-146405-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.