SANTA CRUZ BIOTECHNOLOGY, INC.

Keratin 72 siRNA (m): sc-146420

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 72, also known as Keratin, type II cytoskeletal 72, is a 511 amino acid member of the intermediate filament family that plays a role in hair formation. Keratin 72 is a heterotetramer of two type I and two type II Keratins and is a component of Keratin intermediate filaments in the inner root sheath (IRS) of the hair follicle. In the IRS cuticle, the presence of Keratin 72 is delayed up to the height of the apex of the dermal papilla (at protein level). Highly expressed in hair follicles from scalp and eyebrow, Keratin 72 is also expressed in palmoplantar epidermis but is not expressed in face skin.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Krt72-ps (mouse) mapping to 15 F2.

RESEARCH USE

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

PRODUCT

Keratin 72 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Keratin 72 shRNA Plasmid (m): sc-146420-SH and Keratin 72 shRNA (m) Lentiviral Particles: sc-146420-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 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

Keratin 72 siRNA (m) is recommended for the inhibition of Keratin 72 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 Keratin 72 gene expression knockdown using RT-PCR Primer: Keratin 72 (m)-PR: sc-146420-PR (20 µl). 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.