SANTA CRUZ BIOTECHNOLOGY, INC.

SEEK1 siRNA (h): sc-62986

BACKGROUND

Psoriasis is a chronic inflammatory dermatosis that is characterized by red, scaly skin patches found on the knees, elbows and scalp. Affecting approximately 2% of the population, psoriasis is caused by lesions which are the result of infiltration of inflammatory cells into the dermis and epidermis, as well as abnormal keratinocyte proliferation. Several protein-coding genes, most of which lie on different chromosomes, are implicated in the development of psoriasis. SEEK1, also known as PSORS1C1 (psoriasis susceptibility 1 candidate 1), is a 152 amino acid protein that is expressed in skin, heart, placenta, liver, pancreas and skeletal muscle and is implicated in psoriasis. Like PSORS1 (psoriasis susceptibility 1, also known as HLA-B/C), the gene encoding SEEK1 is located in a region on chromosome 6p21.33 corresponding to major histocompatibility complex (MHC) genes, suggesting a possible role in the immune system. Two isoforms of SEEK1 exist; one that includes the full-length (152 amino acid) isoform spanning exons 1-6, and the other that is 100 amino acids in length and is an alternate splice-isoform consisting of exons 1 and 6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PSORS1C1 (human) mapping to 6p21.33.

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.

PRODUCT

SEEK1 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 SEEK1 shRNA Plasmid (h): sc-62986-SH and SEEK1 shRNA (h) Lentiviral Particles: sc-62986-V as alternate gene silencing products.

For independent verification of SEEK1 (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-62986A, sc-62986B and sc-62986C.

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

SEEK1 siRNA (h) is recommended for the inhibition of SEEK1 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 SEEK1 gene expression knockdown using RT-PCR Primer: SEEK1 (h)-PR: sc-62986-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.