SANTA CRUZ BIOTECHNOLOGY, INC.

NIF3L1 BP1 siRNA (h): sc-78282

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The Power to Question

BACKGROUND

NIF3L1 BP1 (Ngg1-interacting factor 3-like 1 binding protein 1), also known as THOC7 (THO complex subunit 7 homolog), fSAP24 or hTREX30, is a 204 amino acid cytoplasmic and nuclear protein that belongs to the THOC7 family and interacts with NIF3L1. NIF3L1 BP1 is a component of the THO/TREX complex that is recruited to transcribed genes and travels along with RNA polymerase II (Pol II) during elongation, coupling Pol II with RNA splicing and export factors. The THO/TREX complex also plays a role in the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. The gene that encodes NIF3L1 BP1 maps to human chromosome 3p14.1. Chromosome 3 houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: THOC7 (human) mapping to 3p14.1.

PRODUCT

NIF3L1 BP1 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 NIF3L1 BP1 shRNA Plasmid (h): sc-78282-SH and NIF3L1 BP1 shRNA (h) Lentiviral Particles: sc-78282-V as alternate gene silencing products.

For independent verification of NIF3L1 BP1 (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-78282A, sc-78282B and sc-78282C.

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

NIF3L1 BP1 siRNA (h) is recommended for the inhibition of NIF3L1 BP1 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 NIF3L1 BP1 gene expression knockdown using RT-PCR Primer: NIF3L1 BP1 (h)-PR: sc-78282-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.