SANTA CRUZ BIOTECHNOLOGY, INC.

PRPF38B siRNA (h): sc-88142

BACKGROUND

PRPF38B (PRP38 pre-mRNA processing factor 38 (yeast) domain containing B), also known as pre-mRNA-splicing factor 38B, sarcoma antigen NY-SAR-27 or NET1, is a 546 amino acid coiled-coil protein that belongs to the PRP38 family and may be required for pre-mRNA splicing. The gene that encodes PRPF38B is conserved in chimpanzee, canine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans, A. thaliana,* rice and *P. falciparum,* and maps to human chromosome 1p13.3. PRPF38B localizes to nucleus and exists as two isoforms produced by alternative splicing. PRPF38B is phosphorylated upon DNA damage, likely by Atm or ATR. Linked to tumorigenesis and immunogenicity, PRPF38B is a candidate target of miR-211, which exhibits consistently reduced levels in melanoma cells compared to its melanocyte levels.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRPF38B (human) mapping to 1p13.3.

PRODUCT

PRPF38B 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 PRPF38B shRNA Plasmid (h): sc-88142-SH and PRPF38B shRNA (h) Lentiviral Particles: sc-88142-V as alternate gene silencing products.

For independent verification of PRPF38B (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-88142A, sc-88142B and sc-88142C.

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

PRPF38B siRNA (h) is recommended for the inhibition of PRPF38B 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 PRPF38B gene expression knockdown using RT-PCR Primer: PRPF38B (h)-PR: sc-88142-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.

PROTOCOLS

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