SANTA CRUZ BIOTECHNOLOGY, INC.

PRAP1 siRNA (h): sc-90366

BACKGROUND

PRAP1 (proline-rich acidic protein 1), also known as UPA (uterine-specific proline-rich acidic protein), is a 151 amino acid secreted protein that contains two putative casein kinase II phosphorylation sites and exists as four alternatively spliced isoforms. Human PRAP1 shares approximately 50% homology with both rat and mouse orthologues and contains a 20-amino acid signal peptide that is more than 70% conserved between human and rodent. Abundantly expressed in epithelial cells of liver, kidney, gastrointestinal tract and cervix, PRAP1 may play an important role in maintaining normal growth homeostasis in epithelial cells. PRAP1 is significantly down-regulated in hepatocellular carcinoma and right colon adenocarcinoma, compared to adjacent normal tissues, and conversely up-regulated by butyrate, Trichostatin A and 5'-aza-2' deoxycytidine. The gene that encodes PRAP1 maps to human chromosome 10q26.3.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PRAP1 (human) mapping to 10q26.3.

PRODUCT

PRAP1 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 PRAP1 shRNA Plasmid (h): sc-90366-SH and PRAP1 shRNA (h) Lentiviral Particles: sc-90366-V as alternate gene silencing products.

For independent verification of PRAP1 (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-90366A, sc-90366B and sc-90366C.

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

PRAP1 siRNA (h) is recommended for the inhibition of PRAP1 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 PRAP1 gene expression knockdown using RT-PCR Primer: PRAP1 (h)-PR: sc-90366-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.