SANTA CRUZ BIOTECHNOLOGY, INC.

PRAC siRNA (h): sc-76211

BACKGROUND

Prostate, rectum and colon expressed gene protein (PRAC), also known as small nuclear protein PRAC, is a 57 amino acid protein localized to the nucleus. Highly expressed in prostate, rectum and distal colon, and weakly expressed in bladder, PRAC has also been shown to be expressed in the prostate adenocarcinoma cell lines LNCaP and PC-3. The gene encoding PRAC maps to chromosome 17q21.32. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

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3. Liu, X.F., et al. 2001. PRAC: a novel small nuclear protein that is specifically expressed in human prostate and colon. Prostate 47: 125-131.
4. Olsson, P., et al. 2001. GDEP, a new gene differentially expressed in normal prostate and prostate cancer. Prostate 48: 231-241.
5. Chakrabarti, R., et al. 2002. Profiling of differential expression of messenger RNA in normal, benign, and metastatic prostate cell lines. Cancer Genet. Cytogenet. 139: 115-125.
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7. Ernst, T., et al. 2002. Gene expression profiling in prostatic cancer. Verh. Dtsch. Ges. Pathol. 86: 165-175.
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CHROMOSOMAL LOCATION

Genetic locus: PRAC1 (human) mapping to 17q21.32.

PRODUCT

PRAC siRNA (h) 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 PRAC shRNA Plasmid (h): sc-76211-SH and PRAC shRNA (h) Lentiviral Particles: sc-76211-V as alternate gene silencing products.

PROTOCOLS

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

PRAC siRNA (h) is recommended for the inhibition of PRAC 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.

RESEARCH USE

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