SANTA CRUZ BIOTECHNOLOGY, INC.

PGCP siRNA (m): sc-152187

BACKGROUND

PGCP (plasma glutamate carboxypeptidase) is a 472 amino acid secreted protein that is primarily detected in blood plasma. PGCP is a carboxypeptidase that potentially is involved in the hydrolysis of circulating peptides. Due to its upregulation in hepatocellular carcinoma (HCC), it is suspected that PGCP may be a potential serological marker for HCC. PGCP is a member of the Peptidase M28 family of proteins, which also includes PSM (prostate-specific membrane antigen), metallopeptidases and aminopeptidases. The gene encoding PGCP maps to chromosome 8q22.1, which is made up of nearly 146 million bases and encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Pgcp (mouse) mapping to 15 B3.1.

PRODUCT

PGCP siRNA (m) 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 PGCP shRNA Plasmid (m): sc-152187-SH and PGCP shRNA (m) Lentiviral Particles: sc-152187-V as alternate gene silencing products.

For independent verification of PGCP (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-152187A, sc-152187B and sc-152187C.

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

PGCP siRNA (m) is recommended for the inhibition of PGCP expression in mouse 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 PGCP gene expression knockdown using RT-PCR Primer: PGCP (m)-PR: sc-152187-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.