

PAMCI siRNA (h): sc-96236

BACKGROUND

PAMCI (peptidylglycine α -amidating monooxygenase COOH-terminal interactor), also known as RASSF9 (Ras association domain-containing protein 9) or PCIP1, is a 435 amino acid protein that localizes to perinuclear endosomes and contains one Ras-associating domain. Expressed in kidney, liver, brain, testis, heart, lung and skeletal muscle, PAMCI interacts with PAM (peptidylglycine α -amidating monooxygenase) and is thought to regulate the vesicular trafficking of PAM through secretory and endosomal pathways. Human PAMCI shares 85% sequence similarity with its rat counterpart, suggesting a conserved role between species. The gene encoding PAMCI maps to human chromosome 12, which houses over 1,100 genes and comprises approximately 4.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RASSF9 (human) mapping to 12q21.31.

PRODUCT

PAMCI 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PAMCI shRNA Plasmid (h): sc-96236-SH and PAMCI shRNA (h) Lentiviral Particles: sc-96236-V as alternate gene silencing products.

For independent verification of PAMCI (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-96236A, sc-96236B and sc-96236C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

PAMCI siRNA (h) is recommended for the inhibition of PAMCI 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 μ M in 66 μ l. 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 PAMCI gene expression knockdown using RT-PCR Primer: PAMCI (h)-PR: sc-96236-PR (20 μ l). 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.