SANTA CRUZ BIOTECHNOLOGY, INC.

PGBD1 siRNA (h): sc-95167

BACKGROUND

Initially characterized in the cabbage looper moth, Trichoplusia ni, the PGBD (PiggyBac transposable element-derived) family comprises a group of transposases that are conserved in a wide variety of species, including protozoa and primates. More specifically, while PGBD3 and PGBD4 are primate-specific genes, the other three members of the PGBD family (namely PGBD1, PGBD2 and PGBD5) are conserved among a variety of vertebrates. PGDB1 (PiggyBac transposable element derived 1), also known as SCAND4 or HUCEP-4, is an 809 amino acid protein that contains one SCAN box domain and is a member of the PGBD family. Expressed specifically in brain tissue, PGBD1 may, via its SCAN box domain, be involved in transcriptional regulation events within the nucleus.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PGBD1 (human) mapping to 6p22.1.

PRODUCT

PGBD1 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 PGBD1 shRNA Plasmid (h): sc-95167-SH and PGBD1 shRNA (h) Lentiviral Particles: sc-95167-V as alternate gene silencing products.

For independent verification of PGBD1 (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-95167A, sc-95167B and sc-95167C.

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

PGBD1 siRNA (h) is recommended for the inhibition of PGBD1 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 PGBD1 gene expression knockdown using RT-PCR Primer: PGBD1 (h)-PR: sc-95167-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.