SANTA CRUZ BIOTECHNOLOGY, INC.

SH3PXD2B siRNA (h): sc-91980

BACKGROUND

SH3PXD2B (SH3 and PX domains 2B), also known as HOFI or FAD49, is a 911 amino acid protein that contains one PX domain and four SH3 domains. Localized to the nucleus, SH3PXD2B functions to bind to a wide range of phosphoinositides, such as phosphatidylinositol 3,5-biphosphate and, to a lesser extent, phosphatidylinositol 3-phosphate, and is thought to play a role in mitotic clonal expansion during adipocyte differentiation. The gene encoding SH3PXD2B maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: SH3PXD2B (human) mapping to 5q35.1.

PRODUCT

SH3PXD2B 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 SH3PXD2B shRNA Plasmid (h): sc-91980-SH and SH3PXD2B shRNA (h) Lentiviral Particles: sc-91980-V as alternate gene silencing products.

For independent verification of SH3PXD2B (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-91980A, sc-91980B and sc-91980C.

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

SH3PXD2B siRNA (h) is recommended for the inhibition of SH3PXD2B 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 SH3PXD2B gene expression knockdown using RT-PCR Primer: SH3PXD2B (h)-PR: sc-91980-PR (20 µl, 387 bp). 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.