SANTA CRUZ BIOTECHNOLOGY, INC.

Bhlhb9 siRNA (m): sc-141696

BACKGROUND

Basic helix-loop-helix (bHLH) proteins are a group of transcription factors that influence the regulation of neurogenesis, cardiogenesis, myogenesis, differentiation and cell proliferation. p60TRP (p60-transcription-regulator-protein), also known as BHLHb9 (basic helix-loop-helix domain containing, class B, 9) or p60-like protein, is a 547 amino acid cytoplasmic and nuclear protein that belongs to the GPRASP family. A few members of the GRASP family are considered G protein-coupled receptors that play a role in many different stimulus-response pathways. Highly expressed in brain, p60TRP may be involved in the control of cellular aging and survival. In colon cancer cells, p60TRP is down regulated due to CpG hypermethylation of its promoter, and patients suffering from Alzheimer disease have low levels of p60TRP. p60TRP binds to karyopherin β3, also known as Ran BP-5, and protein-phosphatase-2A (PP2A), and is encoded by a gene located on human chromosome Xq22.1.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Bhlhb9 (mouse) mapping to X F1.

PRODUCT

Bhlhb9 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 Bhlhb9 shRNA Plasmid (m): sc-141696-SH and Bhlhb9 shRNA (m) Lentiviral Particles: sc-141696-V as alternate gene silencing products.

For independent verification of Bhlhb9 (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-141696A, sc-141696B and sc-141696C.

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

Bhlhb9 siRNA (m) is recommended for the inhibition of Bhlhb9 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 Bhlhb9 gene expression knockdown using RT-PCR Primer: Bhlhb9 (m)-PR: sc-141696-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.