SANTA CRUZ BIOTECHNOLOGY, INC.

BS69 siRNA (h): sc-106842

BACKGROUND

The adenovirus E1A gene products are nuclear phosphoproteins with the ability to transactivate other adenovirus genes. BS69 specifically interacts with adenovirus 5 E1A and inhibits transactivation by the 289R E1A protein. BS69 interacts with the co-repressor N-CoR through an essential MYND domain in the carboxy terminus of N-CoR. BS69 also inhibits the transcriptional activity of c-Myb. During oncogenesis, this BS69/Myb regulatory circuit maybe be a target for disruption. Another ubiquitously expressed member of the Myb gene family, b-Myb, also interacts with BS69 and N-CoR to function as a transcriptional repressor. BRAM1, a splice variant of BS69, binds specifically to bone morphogenetic protein type IA receptor (BMPR-IA). BRAM1 localizes to the cytoplasm of mammalian cells, while BS69 localizes to the cell nucleus. Unlike BS69, BRAM1 is unable to repress transcription.

REFERENCES

1. Hateboer, G., et al. 1995. BS69, a novel adenovirus E1A-associated protein that inhibits E1A transactivation. EMBO J. 14: 3159-3169.
2. Kurozumi, K., et al. 1998. BRAM1, a BMP receptor-associated molecule involved in BMP signalling. Genes Cells 3: 257-264.
3. Masselink, H., et al. 2000. The adenovirus E1A binding protein BS69 is a corepressor of transcription through recruitment of N-CoR. Oncogene 19: 1538-1546.
4. Ladendorff, N.E., et al. 2001. BS69, an adenovirus E1A-associated protein, inhibits the transcriptional activity of c-Myb. Oncogene 20: 125-132.
5. Masselink, H., et al. 2001. B-myb rescues Ras-induced premature senescence, which requires its transactivation domain. Cancer Lett. 171: 87-101.

CHROMOSOMAL LOCATION

Genetic locus: ZMYND11 (human) mapping to 10p15.3.

PRODUCT

BS69 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 BS69 shRNA Plasmid (h): sc-106842-SH and BS69 shRNA (h) Lentiviral Particles: sc-106842-V as alternate gene silencing products.

For independent verification of BS69 (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-106842A, sc-106842B and sc-106842C.

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

BS69 siRNA (h) is recommended for the inhibition of BS69 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 BS69 gene expression knockdown using RT-PCR Primer: BS69 (h)-PR: sc-106842-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.