SANTA CRUZ BIOTECHNOLOGY, INC.

EVI2B siRNA (m): sc-144963

BACKGROUND

EVI2B (ecotropic viral integration site 2B protein homolog) is a 448 amino acid protein which functions in the differentiation of melanocytes and keratinocytes. Lying within an intron of the Neurofibromin gene, the gene encoding EVI2B is transcribed from the telomere toward the centromere, which is opposite the transcription direction of the Neurofibromin gene. EVI2B is a single-pass transmembrane protein containing an extracellular domain with four glycosylation sites, a N-terminal signal peptide, a cytoplasmic hydrophilic domain and a hydrophobic transmembrane domain. Due to evidence suggesting that gene encoding the mouse homolog lies within a viral integration site that has been identitified in retrovirus-induced myeloid tumors, the gene encoding EVI2B may function as an oncogene in these tumor types. With expression in peripheral blood mononuclear cells, fibroblasts, bone marrow and EBV-transformed lymphoblastoid cell lines, EVI2B is implicated in leukemogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Evi2b (mouse) mapping to 11 B5.

PROTOCOLS

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

PRODUCT

EVI2B 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 EVI2B shRNA Plasmid (m): sc-144963-SH and EVI2B shRNA (m) Lentiviral Particles: sc-144963-V as alternate gene silencing products.

For independent verification of EVI2B (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-144963A, sc-144963B and sc-144963C.

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

EVI2B siRNA (m) is recommended for the inhibition of EVI2B 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 EVI2B gene expression knockdown using RT-PCR Primer: EVI2B (m)-PR: sc-144963-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.