



RIZ siRNA (m): sc-152980

BACKGROUND

The Rb-interacting zinc finger gene RIZ1 (also known as G3B or MTB-Zf) is commonly mutated in colorectal, gastric, and endometrial cancers and has demonstrated a capacity to induce cell cycle arrest and apoptosis. RIZ is a candidate tumor suppressor gene on 1p36, a region frequently rearranged in a wide variety of human tumors. RIZ is the founding member of the PR-domain family of zinc finger genes. Two products are produced from the RIZ locus which differ by the presence or absence of the PR domain; the PR-plus, RIZ1, is commonly lost or underexpressed whereas the PR-minus, RIZ2, is always present in cancer cells. This yin-yang imbalance in the amount of the two RIZ products may be an important cause of malignancy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Prdm2 (mouse) mapping to 4 E1.

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.

PRODUCT

RIZ 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see RIZ shRNA Plasmid (m): sc-152980-SH and RIZ shRNA (m) Lentiviral Particles: sc-152980-V as alternate gene silencing products.

For independent verification of RIZ (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-152980A, sc-152980B and sc-152980C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

RIZ siRNA (m) is recommended for the inhibition of RIZ 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 μ M in 66 μ l. 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.

GENE EXPRESSION MONITORING

RIZ (33AT1045): sc-130256 is recommended as a control antibody for monitoring of RIZ gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor RIZ gene expression knockdown using RT-PCR Primer: RIZ (m)-PR: sc-152980-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.