SANTA CRUZ BIOTECHNOLOGY, INC.

FRBZ1 siRNA (m): sc-145239

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The Power to Question

BACKGROUND

Members of the BTB/POZ family of zinc finger transcription factors contain a POZ (or BTB) domain that mediates homomeric and heteromeric POZ-POZ interactions. FRBZ1, also known as ZBTB41 (zinc finger and BTB domain containing 41) or ZNF924, is a 909 amino acid nuclear protein that contains one BTB (POZ) domain and 14 C_2H_2-type zinc fingers. Thought to play a role in transcriptional regulation, FRBZ1 exists as two alternatively spliced isoforms that are encoded by a gene located on human chromosome 1q31.3. Chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

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CHROMOSOMAL LOCATION

Genetic locus: Zbtb41 (mouse) mapping to 1 F.

PRODUCT

FRBZ1 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 FRBZ1 shRNA Plasmid (m): sc-145239-SH and FRBZ1 shRNA (m) Lentiviral Particles: sc-145239-V as alternate gene silencing products.

For independent verification of FRBZ1 (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-145239A, sc-145239B and sc-145239C.

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

FRBZ1 siRNA (m) is recommended for the inhibition of FRBZ1 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 FRBZ1 gene expression knockdown using RT-PCR Primer: FRBZ1 (m)-PR: sc-145239-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.