SANTA CRUZ BIOTECHNOLOGY, INC.

RBM46 siRNA (h): sc-89235

BACKGROUND

The RBM (RNA-binding motif) gene family encodes proteins with an RNA binding motif. RBM46, also known as cancer/testis antigen 68, is a 533 amino acid protein containing three RNA recognition motifs (RRMs). RNA recognition motifs are one of the most abundant domains in eukaryotes. Characterized by two α helices packed onto a four-stranded β-sheet, these RNA binding domains usually consist of a 90 amino acid sequence that is highly conserved among species. RRM-containing proteins are involved in a high variety of post-translational gene regulation events including splicing, translation regulation, pre-mRNA processing, degradation, alternative splicing, mRNA export, mRNA stability, RNA editing and pre-rRNA complex formation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RBM46 (human) mapping to 4q32.1.

PRODUCT

RBM46 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 RBM46 shRNA Plasmid (h): sc-89235-SH and RBM46 shRNA (h) Lentiviral Particles: sc-89235-V as alternate gene silencing products.

For independent verification of RBM46 (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-89235A, sc-89235B and sc-89235C.

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

RBM46 siRNA (h) is recommended for the inhibition of RBM46 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 RBM46 gene expression knockdown using RT-PCR Primer: RBM46 (h)-PR: sc-89235-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.