



RBM42 siRNA (h): sc-97234

BACKGROUND

Proteins containing RNA recognition motifs, including various hnRNP proteins, are implicated in the regulation of alternative splicing and protein components of snRNPs. The RBM (RNA-binding motif) gene family encodes proteins with an RNA binding motif that have been suggested to play a role in the modulation of apoptosis. RBM42 (RNA binding motif protein 42) is a 480 amino acid nuclear and cytoplasmic protein that belongs to the RRM RBM42 family and exists as four alternatively spliced isoforms. Identified as an hnRNP K binding protein, RBM42 contains one RRM (RNA recognition motif) domain through which it binds the 3'-untranslated region (UTR) of p21 mRNA. RBM42 may assist in the maintenance of cellular ATP levels during stress, most likely by protecting essential mRNAs, and is encoded by a gene that maps to human chromosome 19.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RBM42 (human) mapping to 19q13.12.

PRODUCT

RBM42 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see RBM42 shRNA Plasmid (h): sc-97234-SH and RBM42 shRNA (h) Lentiviral Particles: sc-97234-V as alternate gene silencing products.

For independent verification of RBM42 (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-97234A, sc-97234B and sc-97234C.

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

RBM42 siRNA (h) is recommended for the inhibition of RBM42 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 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor RBM42 gene expression knockdown using RT-PCR Primer: RBM42 (h)-PR: sc-97234-PR (20 μ l). 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.