

# RBM18 siRNA (m): sc-152731

## 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. RBM18 (RNA-binding motif protein 18) is a 190 amino acid protein that contains one RRM (RNA recognition motif) domain. The RBM18 gene maps to human chromosome 9q33.2. Chromosome 9 consists of about 145 million bases and 4% of the human genome. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Rbm18 (mouse) mapping to 2 B.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

RBM18 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see RBM18 shRNA Plasmid (m): sc-152731-SH and RBM18 shRNA (m) Lentiviral Particles: sc-152731-V as alternate gene silencing products.

For independent verification of RBM18 (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-152731A, sc-152731B and sc-152731C.

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

## APPLICATIONS

RBM18 siRNA (m) is recommended for the inhibition of RBM18 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  $\mu$ M in 66  $\mu$ 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 RBM18 gene expression knockdown using RT-PCR Primer: RBM18 (m)-PR: sc-152731-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.