SANTA CRUZ BIOTECHNOLOGY, INC.

RBM9 (H-75): sc-98416

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The Power to Question

BACKGROUND

RMB9 (RNA binding motif protein 9), also known as RTA, fxh, FOX2, Fox-2, HNRBP2 or HRNBP2, is a 390 amino acid protein that contains one RRM (RNA recognition motif) domain. RMB9 is thought to be a key regulator of alternative exon splicing in the nervous system and other cell types. RMB9 regulates the splicing activity of the highly conserved RNA 5'-UGCAUGU-3' element, an intron splicing enhancer that is often located adjacent to tissue-specific alternative exons. RMB9 prevents binding of U2AF65 (U2 snRNP auxiliary factor large subunit) to the 3' splice site of the RNA splicing element which affects alternative splicing of tissue-specific exons. RBM9 also interacts with the ERα (estrogen receptor alpha) transcription factor and regulates ERα transcriptional activity. Eight isoforms of RBM9 exists due to alternative splicing events.

REFERENCES

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5. Yang, G., Huang, S.C., Wu, J.Y. and Benz, E.J. 2008. Regulated Fox-2 isoform expression mediates protein 4.1R splicing during erythroid differentiation. Blood 111: 392-401.
6. Zhang, C., Zhang, Z., Castle, J., Sun, S., Johnson, J., Krainer, A.R. and Zhang, M.Q. 2008. Defining the regulatory network of the tissue-specific splicing factors Fox-1 and Fox-2. Genes Dev. 22: 2550-2563.

CHROMOSOMAL LOCATION

Genetic locus: RBM9 (human) mapping to 22q12.3; Rbm9 (mouse) mapping to 15 D3.

SOURCE

RBM9 (H-75) is a rabbit polyclonal antibody raised against amino acids 46-120 mapping near the N-terminus of RBM9 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RBM9 (H-75) is recommended for detection of RBM9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other RBM family members.

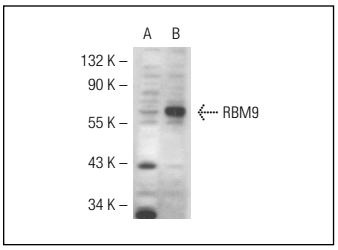
RBM9 (H-75) is also recommended for detection of RBM9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RBM9 siRNA (h): sc-76371, RBM9 siRNA (m): sc-152756, RBM9 shRNA Plasmid (h): sc-76371-SH, RBM9 shRNA Plasmid (m): sc-152756-SH, RBM9 shRNA (h) Lentiviral Particles: sc-76371-V and RBM9 shRNA (m) Lentiviral Particles: sc-152756-V.

Molecular Weight of RBM9 isoforms 1-10: 38-47 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, mouse brain extract: sc-2253 or RBM9 (h4): 293T Lysate: sc-174118.

DATA



RBM9 (H-75): sc-98416. Western blot analysis of RBM9 expression in non-transfected: sc-117752 (**A**) and human RBM9 transfected: sc-174118 (**B**) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.