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RBM24 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5609a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9BX46
Other Accession	Q7T3I7, Q62176, Q9H0Z9, D3Z4I3, NP_694565.1
Reactivity	Human, Mouse
Predicted	Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27099
Calculated MW	24776
Antigen Region	4-32

Additional Information

Gene ID	221662
Other Names	RNA-binding protein 24, RNA-binding motif protein 24, RNA-binding region-containing protein 6, RBM24, RNPC6
Target/Specificity	This RBM24 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 4-32 amino acids from the N-terminal region of human RBM24.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RBM24 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RBM24 (HGNC:21539)
Synonyms	RNPC6

Function	Multifunctional RNA-binding protein involved in the regulation of pre-mRNA splicing, mRNA stability and mRNA translation important for cell fate decision and differentiation (PubMed:20977548, PubMed:24375645, PubMed:29104163, PubMed:29358667). Plays a major role in pre-mRNA alternative splicing regulation (PubMed:26990106, PubMed:29104163). Mediates preferentially muscle-specific exon inclusion in numerous mRNAs important for striated cardiac and skeletal muscle cell differentiation (PubMed:29104163). Binds to intronic splicing enhancer (ISE) composed of stretches of GU-rich motifs localized in flanking intron of exon that will be included by alternative splicing (By similarity). Involved in embryonic stem cell (ESC) transition to cardiac cell differentiation by promoting pre-mRNA alternative splicing events of several pluripotency and/or differentiation genes (PubMed:26990106). Plays a role in the regulation of mRNA stability (PubMed:20977548, PubMed:24356969, PubMed:24375645, PubMed:29104163). Binds to 3'-untranslated region (UTR) AU-rich elements in target transcripts, such as CDKN1A and MYOG, leading to maintain their stabilities (PubMed:20977548, PubMed:24356969). Involved in myogenic differentiation by regulating MYOG levels (PubMed:20977548). Binds to multiple regions in the mRNA 3'-UTR of TP63 isoform 2, hence inducing its destabilization (PubMed:24375645). Also promotes the destabilization of the CHRM2 mRNA via its binding to a region in the coding sequence (PubMed:29104163). Plays a role in the regulation of mRNA translation (PubMed:29358667). Mediates repression of p53/TP53 mRNA translation through its binding to U-rich element in the 3'-UTR, hence preventing EIF4E from binding to p53/TP53 mRNA and translation initiation (PubMed:29358667). Binds to a huge amount of mRNAs (PubMed:29104163). Required for embryonic heart development, sarcomer and M-band formation in striated muscles (By similarity). Together with RBM20, promotes the expression of short isoforms of PDLIM5/ENH in cardiomyocytes (By similarity).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:Q6GQD3}. Cytoplasm {ECO:0000250|UniProtKB:D3Z4I3}
Tissue Location	Expressed in fetal and adult heart and skeletal muscles (PubMed:22345307, PubMed:25313962)

Background

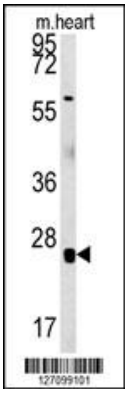
RBM24 is preferentially expressed in muscle during differentiation in vitro and may regulate myogenic differentiation.

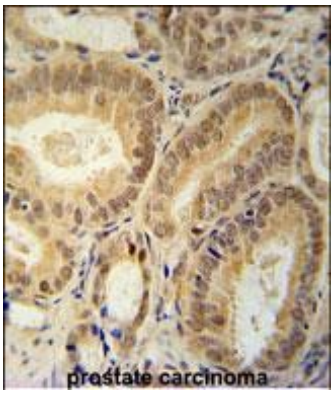
References

Miyamoto, S., et al. Genes Cells 14(11):1241-1252(2009)
Lim, J., et al. Cell 125(4):801-814(2006)
Mungall, A.J., et al. Nature 425(6960):805-811(2003)

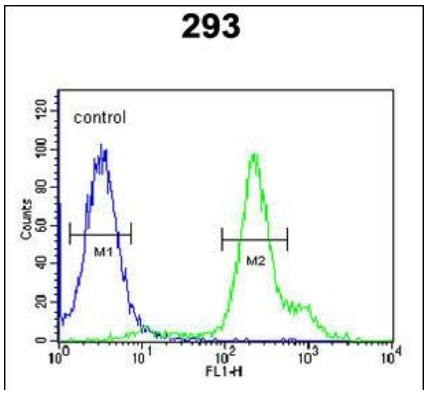
Images

RBM24 Antibody (N-term) (Cat. #AP5609a) western blot analysis in mouse heart tissue lysates (15ug/lane).This demonstrates the RBM24 antibody detected RBM24 protein (arrow).





RBM24 Antibody (N-term) (Cat. #AP5609a) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RBM24 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



RBM24 Antibody (N-term) (Cat. #AP5609a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.