

RBPMs Rabbit pAb

Catalog # AP97208

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q93062
Other Accession	Q93062
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21802
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RBPMs
Epitope Specificity	1-100/196
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RRM (RNA recognition motif) domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the RNA recognition motif family of RNA-binding proteins. The RNA recognition motif is between 80-100 amino acids in length and family members contain one to four copies of the motif. The RNA recognition motif consists of two short stretches of conserved sequence, as well as a few highly conserved hydrophobic residues. The encoded protein has a single, putative RNA recognition motif in its N-terminus. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jun 2013]

Additional Information

Gene ID	11030
Other Names	HERMES; 2010300K22Rik; 2700019M19Rik; RBP-MS; RGD1561067; RBPS2_CHICK; RBPMs2; Heart and RRM expressed sequence (Hermes); RBPMs_HUMAN; RBPMs; RBPMs_MOUSE; RNA binding protein, mRNA processing factor; RNA binding protein with multiple splicing
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RBPM5 (HGNC:19097)
Synonyms	HERMES
Function	[Isoform A]: RNA binding protein that mediates the regulation of pre-mRNA alternative splicing (AS) (PubMed:24860013, PubMed:26347403). Acts either as activator (FLNB, HSPG2, LIPA1, MYOCD, PTPRF and PPFIBP1) or repressor (TPM1, ACTN1, ITGA7, PIEZO1, LSM14B, MBNL1 and MBML2) of splicing events on specific pre-mRNA targets (By similarity). Together with RNA binding proteins RBFOX2 and MBNL1/2, activates a splicing program associated with differentiated contractile vascular smooth muscle cells (SMC) by regulating AS of numerous pre- mRNA involved in actin cytoskeleton and focal adhesion machineries, suggesting a role in promoting a cell differentiated state (By similarity). Binds to introns, exons and 3'-UTR associated with tandem CAC trinucleotide motifs separated by a variable spacer region, at a minimum as a dimer. The minimal length of RNA required for RBPM5- binding tandem CAC motifs is 15 nt, with spacing ranging from 1 to 9 nt. Can also bind to CA dinucleotide repeats (PubMed:24860013, PubMed:26347403). Mediates repression of TPM1 exon 3 by binding to CAC tandem repeats in the flanking intronic regions, followed by higher- order oligomerization and heterotypic interactions with other splicing regulators including MBNL1 and RBFOX2, which prevents assembly of ATP- dependent splicing complexes (By similarity).
Cellular Location	Nucleus. Cytoplasm. Cytoplasm, Stress granule. Cytoplasm, P-body. Note=Localized to cytoplasmic stress granules after oxidative stress (PubMed:24860013). Translocates into cytoplasmic stress granules that probably corresponds to P-bodies in response to oxidative stress (PubMed:26347403)
Tissue Location	Ubiquitously expressed, at various levels depending on the isoform and the tissue (PubMed:8855282). Strongly expressed in the heart, prostate, small intestine, large intestine, and ovary; moderately expressed in the placenta, lung, liver, kidney, pancreas, and testis; and poorly expressed in the skeletal muscle, spleen, thymus and peripheral leukocytes (PubMed:8855282)

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