

RBPMs Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20354b

Product Information

Application	WB, E
Primary Accession	Q93062
Other Accession	Q9WVB0
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42810
Calculated MW	21802
Antigen Region	166-193

Additional Information

Gene ID	11030
Other Names	RNA-binding protein with multiple splicing, RBP-MS, Heart and RRM expressed sequence, Hermes, RBPMs, HERMES
Target/Specificity	This RBPMs antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 166-193 amino acids from the C-terminal region of human RBPMs.
Dilution	WB~~1:1000 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	RBPMs Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

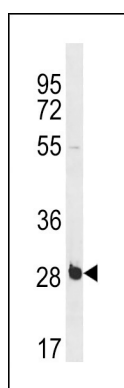
Name	RBPMs (HGNC:19097)
Synonyms	HERMES

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 RBPMS- 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)

Background

Acts as a coactivator of transcriptional activity. Required to increase TGFB1/Smad-mediated transactivation. Acts through SMAD2, SMAD3 and SMAD4 to increase transcriptional activity. Increases phosphorylation of SMAD2 and SMAD3 on their C-terminal SSXS motif, possibly through recruitment of TGFBR1. Promotes the nuclear accumulation of SMAD2, SMAD3 and SMAD4 proteins. Binds to poly(A) RNA.

Images



RBPMS Antibody (C-term) (Cat. #AP20354b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the RBPMS antibody detected the RBPMS protein (arrow).