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RBPMS Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20354b

Specification

RBPMS Blocking Peptide (C-term) - Product Information

Primary Accession	Q93062
Other Accession	Q9WVB0

RBPMS Blocking Peptide (C-term) - Additional Information

Gene ID 11030

Other Names
RNA-binding protein with multiple splicing, RBP-MS, Heart and RRM expressed sequence, Hermes, RBPMS, HERMES

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RBPMS Blocking Peptide (C-term) - 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:<a

href="http://www.uniprot.org/citations/26347403" target="_blank">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)

RBPMS Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

RBPMS Blocking Peptide (C-term) - Images

RBPMS Blocking Peptide (C-term) - 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.