10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RBM4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16990b

Specification

RBM4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9BWF3

RBM4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5936

Other Names
RNA-binding protein 4, Lark homolog, hLark, RNA-binding motif protein 4, RNA-binding motif protein 4a, RBM4, RBM4A

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.

RBM4 Antibody (C-term) Blocking Peptide - Protein Information

Name RBM4

Synonyms RBM4A

Function
RNA-binding factor involved in multiple aspects of cellular processes like alternative splicing of pre-mRNA and translation regulation. Modulates alternative 5'-splice site and exon selection. Acts as a muscle cell differentiation-promoting factor. Activates exon skipping of the PTB pre-mRNA during muscle cell differentiation. Antagonizes the activity of the splicing factor PTBP1 to modulate muscle cell-specific exon selection of alpha tropomyosin. Binds to intronic pyrimidine-rich sequence of the TPM1 and MAPT pre-mRNAs. Required for the translational activation of PER1 mRNA in response to circadian clock. Binds directly to the 3'-UTR of the PER1 mRNA. Exerts a suppressive activity on Cap-dependent translation via binding to CU- rich responsive elements within the 3'UTR of mRNAs, a process increased under stress conditions or during myocytes differentiation. Recruits EIF4A1 to stimulate IRES-dependent translation initiation in respons to cellular stress. Associates to internal ribosome entry segment (IRES) in target mRNA species under stress conditions. Plays a role for miRNA- guided RNA cleavage and translation suppression by promoting association of AGO2-containing miRNPs with their cognate target mRNAs. Associates with miRNAs during muscle cell differentiation. Binds preferentially to 5'-CGCGCG[GCA]-3' motif in vitro.

Cellular Location
Nucleus. Nucleus, nucleolus. Nucleus speckle. Cytoplasm. Cytoplasmic granule. Note=Undergoes continuous nucleocytoplasmic shuttling. Upon nuclear import colocalizes with SR proteins in nuclear speckles. Arsenite stress-induced phosphorylation increases its subcellular relocalization from the nucleus to the cytoplasm and to cytoplasmic stress granules (SG) via a p38 MAPK signaling pathway. Primarily localized in nucleus and nucleoli under cell growth conditions and accumulated in the cytoplasm and cytoplasm perinuclear granules upon muscle cell differentiation

Tissue Location
Expressed in the cerebellum. Expressed in neurons and glial cells, including layers II neurons in the frontal cortex and CA1 pyramidal neurons in the hippocampus. Expressed in heart, liver, pancreas, skeletal muscle, placenta, primary fibroblasts and peripheral blood monocytes (at protein level). Ubiquitously expressed. Highly expressed in heart, placenta and skeletal muscle. Weakly expressed in pancreas, kidney, liver, lung and brain.

RBM4 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

RBM4 Antibody (C-term) Blocking Peptide - Images

RBM4 Antibody (C-term) Blocking Peptide - Background

RBM4 may play a role in alternative splice site selection during pre-mRNA processing.

RBM4 Antibody (C-term) Blocking Peptide - References

Lin, J.C., et al. J. Biol. Chem. 284(50):34658-34665(2009)Brooks, Y.S., et al. J. Biol. Chem. 284(27):18033-18046(2009)Markus, M.A., et al. Int. J. Biochem. Cell Biol. 41(4):740-743(2009)Pfuhl, T., et al. Neurosci. Lett. 444(1):11-15(2008)Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)