

RBM15 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP5697b

Specification

RBM15 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q96T37
Other Accession NP 073605.4

RBM15 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 64783

Other Names

Putative RNA-binding protein 15, One-twenty two protein 1, RNA-binding motif protein 15, RBM15, OTT, OTT1

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.

RBM15 Antibody (C-term) Blocking peptide - Protein Information

Name RBM15 {ECO:0000303|PubMed:11431691, ECO:0000312|HGNC:HGNC:14959}

Function

RNA-binding protein that acts as a key regulator of N6- methyladenosine (m6A) methylation of RNAs, thereby regulating different processes, such as hematopoietic cell homeostasis, alternative splicing of mRNAs and X chromosome inactivation mediated by Xist RNA (PubMed:27602518). Associated component of the WMM complex, a complex that mediates N6-methyladenosine (m6A) methylation of RNAs, a modification that plays a role in the efficiency of mRNA splicing and RNA processing (By similarity). Plays a key role in m6A methylation, possibly by binding target RNAs and recruiting the WMM complex (PubMed:27602518). Involved in random X inactivation mediated by Xist RNA: acts by binding Xist RNA and recruiting the WMM complex, which mediates m6A methylation, leading to target YTHDC1 reader on Xist RNA and promoting transcription repression activity of Xist (PubMed:27602518). Required for the development of multiple tissues, such as the maintenance of the homeostasis of long-term hematopoietic stem cells and for megakaryocyte (MK) and B-cell differentiation (By similarity). Regulates megakaryocyte differentiation by regulating alternative splicing of genes important for megakaryocyte differentiation; probably regulates alternative splicing via m6A



regulation (PubMed:26575292). Required for placental vascular branching morphogenesis and embryonic development of the heart and spleen (By similarity). Acts as a regulator of thrombopoietin response in hematopoietic stem cells by regulating alternative splicing of MPL (By similarity). May also function as an mRNA export factor, stimulating export and expression of RTE-containing mRNAs which are present in many retrotransposons that require to be exported prior to splicing (PubMed:17001072, PubMed:19786495). High affinity binding of pre-mRNA to RBM15 may allow targeting of the mRNP to the export helicase DBP5 in a manner that is independent of splicing-mediated NXF1 deposition, resulting in export prior to splicing (PubMed:17001072, PubMed:19786495, PubMed:19786495). May be implicated in HOX gene regulation (PubMed:11344311).

Cellular Location

Nucleus speckle. Nucleus, nucleoplasm. Nucleus envelope. Nucleus membrane; Peripheral membrane protein. Note=Colocalizes at the nuclear pore with DBP5 and NXF1.

RBM15 Antibody (C-term) Blocking peptide - Protocols

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

Blocking Peptides

RBM15 Antibody (C-term) Blocking peptide - Images

RBM15 Antibody (C-term) Blocking peptide - Background

Members of the SPEN (Split-end) family of proteins, including RBM15, have repressor function in several signaling pathways and may bind to RNA through interaction with spliceosomecomponents (Hiriart et al., 2005 [PubMed 16129689]). [supplied by OMIM].

RBM15 Antibody (C-term) Blocking peptide - References

Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)Ma, Z., et al. Nat. Genet. 28(3):220-221(2001)Mercher, T., et al. Proc. Natl. Acad. Sci. U.S.A. 98(10):5776-5779(2001)