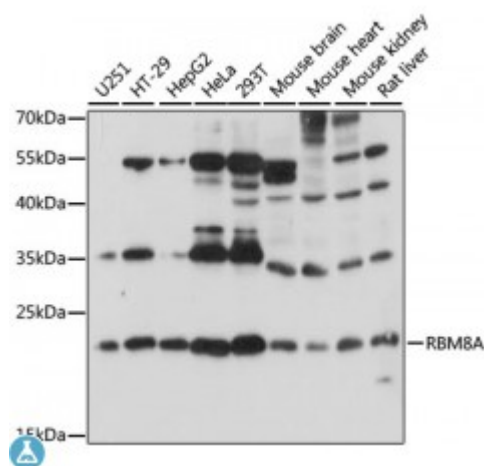


Anti-RBM8A Antibody



Description

This gene encodes a protein with a conserved RNA-binding motif. The protein is found predominantly in the nucleus, although it is also present in the cytoplasm. It is preferentially associated with mRNAs produced by splicing, including both nuclear mRNAs and newly exported cytoplasmic mRNAs. It is thought that the protein remains associated with spliced mRNAs as a tag to indicate where introns had been present, thus coupling pre- and post-mRNA splicing events. Previously, it was thought that two genes encode this protein, RBM8A and RBM8B; it is now thought that the RBM8B locus is a pseudogene. There are two alternate translation start codons with this gene, which result in two forms of the protein. An allele mutation and a low-frequency noncoding single-nucleotide polymorphism (SNP) in this gene cause thrombocytopenia-absent radius (TAR) syndrome.

Model	STJ117319
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human RBM8A (NP_005096.1).
Gene ID	9939
Gene Symbol	RBM8A
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Ubiquitous

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	RNA-binding protein 8A Binder of OVCA1-1 BOV-1 RNA-binding motif protein 8A RNA-binding protein Y14 Ribonucleoprotein RBM8A
Molecular Weight	19.889 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9905OMIM:605313Reactome:R-HSA-109688
Alternative Names	RNA-binding protein 8A Binder of OVCA1-1 BOV-1 RNA-binding motif protein 8A RNA-binding protein Y14 Ribonucleoprotein RBM8A
Function	Core component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junctions on mRNAs, The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism, The EJC marks the position of the exon-exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD), The MAGOH-RBM8A heterodimer inhibits the ATPase activity of EIF4A3, thereby trapping the ATP-bound EJC core onto spliced mRNA in a stable conformation, The MAGOH-RBM8A heterodimer interacts with the EJC key regulator PYM1 leading to EJC disassembly in the cytoplasm and translation enhancement of EJC-bearing spliced mRNAs by recruiting them to the ribosomal 48S preinitiation complex, Its removal from cytoplasmic mRNAs requires translation initiation from EJC-bearing spliced mRNAs, Associates preferentially with mRNAs produced by splicing, Does not interact with pre-mRNAs, introns, or mRNAs produced from intronless cDNAs, Associates with both nuclear mRNAs and newly exported cytoplasmic mRNAs, The MAGOH-RBM8A heterodimer is a component of the nonsense mediated decay (NMD) pathway, Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes)
Cellular Localization	Nucleus,