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

RBM7 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19532b

Specification

RBM7 Antibody(C-term) - Product Information

Application	**WB,E**
Primary Accession	Q9Y580
Other Accession	NP_057174.1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**30504**
Antigen Region	**196-222**

RBM7 Antibody(C-term) - Additional Information

Gene ID 10179

Other Names
RNA-binding protein 7, RNA-binding motif protein 7, RBM7

Target/Specificity
This RBM7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 196-222 amino acids from the C-terminal region of human RBM7.

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
RBM7 Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RBM7 Antibody(C-term) - Protein Information

Name RBM7 (HGNC:9904)

Function RNA-binding subunit of the trimeric nuclear exosome targeting (NEXT) complex, a

complex that functions as an RNA exosome cofactor that directs a subset of non-coding short-lived RNAs for exosomal degradation (PubMed:25189701, PubMed:25525152, PubMed:25578728, PubMed:25852104, PubMed:27871484). NEXT is involved in surveillance and turnover of aberrant transcripts and non-coding RNAs (PubMed:25189701, PubMed:25852104, PubMed:27871484). Binds preferentially polyuridine sequences and associates with newly synthesized RNAs, including pre- mRNAs and short-lived exosome substrates such as promoter upstream transcripts (PROMPTs), enhancer RNAs (eRNAs), and 3'-extended products from small nuclear RNAs (snRNAs) (PubMed:25189701, PubMed:25525152, PubMed:25578728, PubMed:25852104). Participates in several biological processes including DNA damage response (DDR) and stress response (PubMed:25525152, PubMed:30824372). During stress response, activation of the p38MAPK-MK2 pathway decreases RBM7-RNA-binding and subsequently the RNA exosome degradation activities, thereby modulating the turnover of non-coding transcriptome (PubMed:25525152). Participates in DNA damage response (DDR), through its interaction with MEPCE and LARP7, the core subunits of 7SK snRNP complex, that release the positive transcription elongation factor b (P-TEFb) complex from the 7SK snRNP. In turn, activation of P-TEFb complex induces the transcription of P-TEFb-dependent DDR genes to promote cell viability (PubMed:30824372).

Cellular Location
Nucleus, nucleoplasm. Nucleus {ECO:0000250|UniProtKB:Q9CQT2}. Note=Excluded from the nucleolus

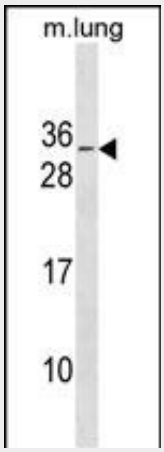
Tissue Location
Ubiquitous.

RBM7 Antibody(C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RBM7 Antibody(C-term) - Images



RBM7 Antibody (C-term) (Cat. #AP19532b) western blot analysis in mouse lung tissue lysates

(35ug/lane).This demonstrates the RBM7 antibody detected the RBM7 protein (arrow).

RBM7 Antibody(C-term) - Background

Possible involved in germ cell RNA processing and meiosis.

RBM7 Antibody(C-term) - References

Xin, X., et al. Genome Res. 19(7):1262-1269(2009)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)
Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)
Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)