

RBM7 Antibody(C-term) Blocking peptide
Synthetic peptide
Catalog # BP19532b**Specification**

RBM7 Antibody(C-term) Blocking peptide - Product InformationPrimary Accession [Q9Y580](#)**RBM7 Antibody(C-term) Blocking peptide - Additional Information****Gene ID** 10179**Other Names**

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

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.

RBM7 Antibody(C-term) Blocking peptide - 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](http://www.uniprot.org/citations/25189701), PubMed: [25525152](http://www.uniprot.org/citations/25525152), PubMed: [25578728](http://www.uniprot.org/citations/25578728), PubMed: [25852104](http://www.uniprot.org/citations/25852104), PubMed: [27871484](http://www.uniprot.org/citations/27871484)). NEXT is involved in surveillance and turnover of aberrant transcripts and non-coding RNAs (PubMed: [25189701](http://www.uniprot.org/citations/25189701), PubMed: [25852104](http://www.uniprot.org/citations/25852104), PubMed: [27871484](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25189701), PubMed: [25525152](http://www.uniprot.org/citations/25525152), PubMed: [25578728](http://www.uniprot.org/citations/25578728), PubMed: [25852104](http://www.uniprot.org/citations/25852104)).

target="_blank">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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

RBM7 Antibody(C-term) Blocking peptide - Images

RBM7 Antibody(C-term) Blocking peptide - Background

Possible involved in germ cell RNA processing and meiosis.

RBM7 Antibody(C-term) Blocking peptide - 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)