

LARP7 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12990b**Specification**

LARP7 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q4G0J3](#)**LARP7 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 51574

Other Names

La-related protein 7, La ribonucleoprotein domain family member 7, P-TEFb-interaction protein for 7SK stability, PIP7S, LARP7

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.

LARP7 Antibody (C-term) Blocking peptide - Protein Information**Name** LARP7 {ECO:0000303|PubMed:18483487, ECO:0000312|HGNC:HGNC:24912}**Function**

RNA-binding protein that specifically binds distinct small nuclear RNA (snRNAs) and regulates their processing and function (PubMed: [18249148](http://www.uniprot.org/citations/18249148), PubMed: [32017898](http://www.uniprot.org/citations/32017898)). Specifically binds the 7SK snRNA (7SK RNA) and acts as a core component of the 7SK ribonucleoprotein (RNP) complex, thereby acting as a negative regulator of transcription elongation by RNA polymerase II (PubMed: [18249148](http://www.uniprot.org/citations/18249148), PubMed: [18483487](http://www.uniprot.org/citations/18483487)). The 7SK RNP complex sequesters the positive transcription elongation factor b (P-TEFb) in a large inactive 7SK RNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation (PubMed: [18249148](http://www.uniprot.org/citations/18249148), PubMed: [18483487](http://www.uniprot.org/citations/18483487)). The 7SK RNP complex also promotes snRNA gene transcription by RNA polymerase II via interaction with the little elongation complex (LEC) (PubMed: [28254838](http://www.uniprot.org/citations/28254838)). LARP7 specifically binds to the highly conserved 3'-terminal U-rich stretch of 7SK RNA; on stimulation, remains associated with 7SK RNA, whereas P-TEFb is released from the complex (PubMed: [18249148](http://www.uniprot.org/citations/18249148)).

[18281698](http://www.uniprot.org/citations/18281698), PubMed: [18483487](http://www.uniprot.org/citations/18483487)). LARP7 also acts as a regulator of mRNA splicing fidelity by promoting U6 snRNA processing (PubMed: [32017898](http://www.uniprot.org/citations/32017898)). Specifically binds U6 snRNAs and associates with a subset of box C/D RNP complexes: promotes U6 snRNA 2'-O-methylation by facilitating U6 snRNA loading into box C/D RNP complexes (PubMed: [32017898](http://www.uniprot.org/citations/32017898)). U6 snRNA 2'-O-methylation is required for mRNA splicing fidelity (PubMed: [32017898](http://www.uniprot.org/citations/32017898)). Binds U6 snRNAs with a 5'- CAGGG-3' sequence motif (PubMed: [32017898](http://www.uniprot.org/citations/32017898)). U6 snRNA processing is required for spermatogenesis (By similarity).

Cellular Location

Nucleus, nucleoplasm

LARP7 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

LARP7 Antibody (C-term) Blocking peptide - Images

LARP7 Antibody (C-term) Blocking peptide - Background

LARP7 is a negative transcriptional regulator of polymerase II genes, acting by means of the 7SK RNP system. Within the 7SK RNP complex, the positive transcription elongation factor b (P-TEFb) is sequestered in an inactive form, preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation.

LARP7 Antibody (C-term) Blocking peptide - References

Tyagi, M., et al. J. Virol. 84(13):6425-6437(2010)Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010)Markert, A., et al. EMBO Rep. 9(6):569-575(2008)Krueger, B.J., et al. Nucleic Acids Res. 36(7):2219-2229(2008)He, N., et al. Mol. Cell 29(5):588-599(2008)