

LARP7 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12990b

Specification

LARP7 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O4G0J3
Other Accession	O5XI01 , O05CL8 , O4R627 , NP_056269.1 , NP_057732.2
Reactivity	Human
Predicted	Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	66899
Antigen Region	527-556

LARP7 Antibody (C-term) - 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

Target/Specificity

This LARP7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 527-556 amino acids from the C-terminal region of human LARP7.

Dilution

WB~~1:1000

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

LARP7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LARP7 Antibody (C-term) - 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](#), PubMed:[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](#), PubMed:[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](#), PubMed:[18483487](#)). The 7SK RNP complex also promotes snRNA gene transcription by RNA polymerase II via interaction with the little elongation complex (LEC) (PubMed:[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:[18281698](#), PubMed:[18483487](#)). LARP7 also acts as a regulator of mRNA splicing fidelity by promoting U6 snRNA processing (PubMed:[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](#)). U6 snRNA 2'-O-methylation is required for mRNA splicing fidelity (PubMed:[32017898](#)). Binds U6 snRNAs with a 5'- CAGGG-3' sequence motif (PubMed:[32017898](#)). U6 snRNA processing is required for spermatogenesis (By similarity).

Cellular Location

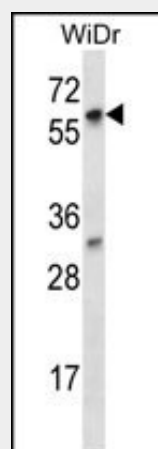
Nucleus, nucleoplasm

LARP7 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 Cytometry](#)
- [Cell Culture](#)

LARP7 Antibody (C-term) - Images



LARP7 Antibody (C-term) (Cat. #AP12990b) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the LARP7 antibody detected the LARP7 protein (arrow).

LARP7 Antibody (C-term) - 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) - 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)