

LARP1 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI12097

Specification

LARP1 antibody - N-terminal region - Product Information

Application	WB
Primary Accession	Q6PKG0
Other Accession	NM_033551 , NP_291029
Reactivity	Human, Rabbit
Predicted	Human, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123kDa KDa

LARP1 antibody - N-terminal region - Additional Information

Gene ID 23367

Alias Symbol **KIAA0731, LARP, MGC19556**
Other Names
La-related protein 1, La ribonucleoprotein domain family member 1, LARP1, KIAA0731, LARP

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-LARP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

LARP1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

LARP1 antibody - N-terminal region - Protein Information

Name LARP1

Synonyms KIAA0731, LARP

Function

RNA-binding protein that regulates the translation of specific target mRNA species downstream of the mTORC1 complex, in function of growth signals and nutrient availability (PubMed:20430826, PubMed:23711370, PubMed:24532714, PubMed:25940091, PubMed:28650797, PubMed:28650797).

[28673543](http://www.uniprot.org/citations/28673543), PubMed: [29244122](http://www.uniprot.org/citations/29244122)). Interacts on the one hand with the 3' poly-A tails that are present in all mRNA molecules, and on the other hand with the 7-methylguanosine cap structure of mRNAs containing a 5' terminal oligopyrimidine (5'TOP) motif, which is present in mRNAs encoding ribosomal proteins and several components of the translation machinery (PubMed: [23711370](http://www.uniprot.org/citations/23711370) target="_blank">23711370, PubMed: [25940091](http://www.uniprot.org/citations/25940091) target="_blank">25940091, PubMed: [28650797](http://www.uniprot.org/citations/28650797) target="_blank">28650797, PubMed: [29244122](http://www.uniprot.org/citations/29244122) target="_blank">29244122, PubMed: [26206669](http://www.uniprot.org/citations/26206669) target="_blank">26206669, PubMed: [28379136](http://www.uniprot.org/citations/28379136) target="_blank">28379136). The interaction with the 5' end of mRNAs containing a 5'TOP motif leads to translational repression by preventing the binding of EIF4G1 (PubMed: [25940091](http://www.uniprot.org/citations/25940091) target="_blank">25940091, PubMed: [28650797](http://www.uniprot.org/citations/28650797) target="_blank">28650797, PubMed: [29244122](http://www.uniprot.org/citations/29244122) target="_blank">29244122, PubMed: [28379136](http://www.uniprot.org/citations/28379136) target="_blank">28379136). When mTORC1 is activated, LARP1 is phosphorylated and dissociates from the 5' untranslated region (UTR) of mRNA (PubMed: [25940091](http://www.uniprot.org/citations/25940091) target="_blank">25940091, PubMed: [28650797](http://www.uniprot.org/citations/28650797) target="_blank">28650797). Does not prevent binding of EIF4G1 to mRNAs that lack a 5'TOP motif (PubMed: [28379136](http://www.uniprot.org/citations/28379136) target="_blank">28379136). Interacts with the free 40S ribosome subunit and with ribosomes, both monosomes and polysomes (PubMed: [20430826](http://www.uniprot.org/citations/20430826) target="_blank">20430826, PubMed: [24532714](http://www.uniprot.org/citations/24532714) target="_blank">24532714, PubMed: [25940091](http://www.uniprot.org/citations/25940091) target="_blank">25940091, PubMed: [28673543](http://www.uniprot.org/citations/28673543) target="_blank">28673543). Under normal nutrient availability, interacts primarily with the 3' untranslated region (UTR) of mRNAs encoding ribosomal proteins and increases protein synthesis (PubMed: [23711370](http://www.uniprot.org/citations/23711370) target="_blank">23711370, PubMed: [28650797](http://www.uniprot.org/citations/28650797) target="_blank">28650797). Associates with actively translating ribosomes and stimulates translation of mRNAs containing a 5'TOP motif, thereby regulating protein synthesis, and as a consequence, cell growth and proliferation (PubMed: [20430826](http://www.uniprot.org/citations/20430826) target="_blank">20430826, PubMed: [24532714](http://www.uniprot.org/citations/24532714) target="_blank">24532714). Stabilizes mRNAs species with a 5'TOP motif, which is required to prevent apoptosis (PubMed: [20430826](http://www.uniprot.org/citations/20430826) target="_blank">20430826, PubMed: [23711370](http://www.uniprot.org/citations/23711370) target="_blank">23711370, PubMed: [25940091](http://www.uniprot.org/citations/25940091) target="_blank">25940091, PubMed: [28673543](http://www.uniprot.org/citations/28673543) target="_blank">28673543).

Cellular Location

Cytoplasm. Cytoplasmic granule Note=Colocalizes with RPTOR and PABPC1 in cytoplasmic granules that resemble stress granules.

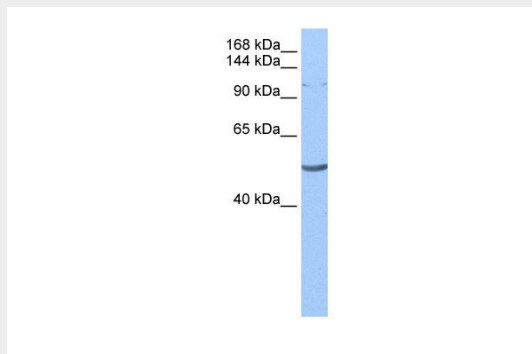
LARP1 antibody - N-terminal region - Protocols

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](#)

LARP1 antibody - N-terminal region - Images



WB Suggested Anti-LARP1 Antibody Titration: 0.2-1 µg/ml

Positive Control: 721_B cell lysate

LARP1 is strongly supported by BioGPS gene expression data to be expressed in Human 721_B cells

LARP1 antibody - N-terminal region - References

Ewing, R.M., Mol. Syst. Biol. 3, 89 (2007) Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.