

LARP1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56558

Specification

LARP1 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6PKG0
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123510

LARP1 Polyclonal Antibody - Additional Information

Gene ID 23367

Other Names

La-related protein 1, La ribonucleoprotein domain family member 1, LARP1, KIAA0731, LARP

Dilution

WB~~1:1000
IHC-P~~N/A
IHC-F~~N/A
IF~~1:50~200
ICC~~N/A
E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

LARP1 Polyclonal Antibody - 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:>28673543, PubMed:>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, PubMed:>25940091, PubMed:>26206669, PubMed:>28379136, PubMed:>28650797, PubMed:>29244122). 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, PubMed:>28379136, PubMed:>28650797, PubMed:>29244122). When mTORC1 is activated, LARP1 is phosphorylated and dissociates from the 5' untranslated region (UTR) of mRNA (PubMed:>25940091, PubMed:>28650797). Does not prevent binding of EIF4G1 to mRNAs that lack a 5'TOP motif (PubMed:>28379136). Interacts with the free 40S ribosome subunit and with ribosomes, both monosomes and polysomes (PubMed:>20430826, PubMed:>24532714, PubMed:>25940091, PubMed:>28673543). Under normal nutrient availability, interacts primarily with the 3' untranslated region (UTR) of mRNAs encoding ribosomal proteins and increases protein synthesis (PubMed:>23711370, PubMed:>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, PubMed:>24532714). Stabilizes mRNAs species with a 5'TOP motif, which is required to prevent apoptosis (PubMed:>20430826, PubMed:>23711370, PubMed:>25940091, PubMed:>28673543).

Cellular Location

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

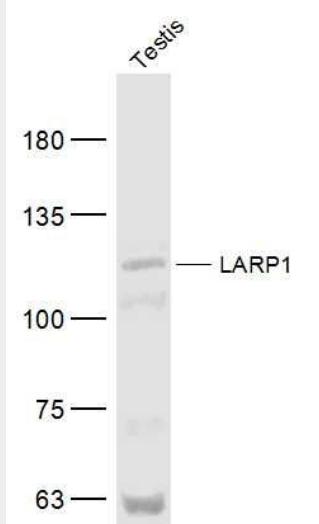
LARP1 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images



Sample:

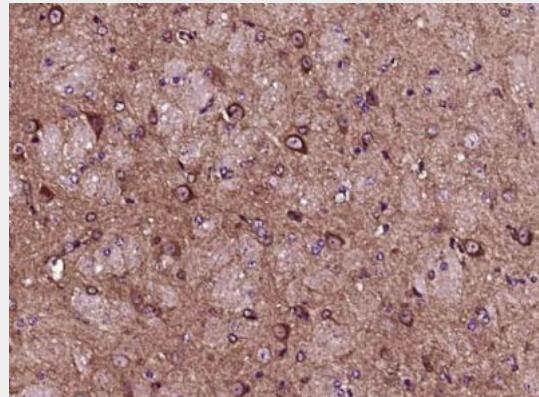
Testis (Mouse) Lysate at 40 ug

Primary: Anti-LARP1 (bs-17101R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 124 kD

Observed band size: 124 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LARP1) Polyclonal Antibody, Unconjugated (bs-17101R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.