

LARP1 Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	150	Rabbit	#Q6PKG0	23367

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

LARP1 Antibody recognizes endogenous levels of total LARP1 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro314 of human LARP1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

La-related protein 1 (LARP1) is a ubiquitously expressed RNA binding protein that promotes both global and specific mRNA translation in cells (1). LARP1 belongs to the La-related protein family and contains two RNA binding domains, a La motif (LAM), and a neighboring RNA recognition motif-like (RRM-L) domain (1). Research studies indicate that LARP1 acts downstream of mTORC1 to facilitate cell proliferation and growth by promoting global mRNA translation and translation of mRNAs containing a 5'Terminal Oligo-Pyrimidine (5'TOP) motif, which code for translational machinery components (2,3). At the molecular level, LARP1 associates with 5'TOP mRNAs and multiple translation machinery components to positively regulate translation (2,4). Additional studies show that LARP1 expression is upregulated in hepatocellular carcinoma (HCC) patients and that high LARP1 expression in HCC negatively correlates with survival rate (5).

Background References

1. Bayfield, M.A. et al. (2010) *Biochim Biophys Acta* 1799, 365-78.
2. Tcherkezian, J. et al. (2014) *Genes Dev* 28, 357-71.
3. Burrows, C. et al. (2010) *Nucleic Acids Res* 38, 5542-53.
4. Aoki, K. et al. (2013) *FEBS Lett* 587, 2173-8.
5. Xie, C. et al. (2013) *J Transl Med* 11, 272.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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