

## **ZFP36L2 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP53380

## **Specification**

## **ZFP36L2 Antibody - Product Information**

Application WB
Primary Accession P47974
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 51 KDa
Antigen Region 221-270

## **ZFP36L2 Antibody - Additional Information**

#### Gene ID 678

## Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZFP36L2. The exact sequence is proprietary.

## **Dilution**

WB~~ 1:1000

#### **Format**

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

#### ZFP36L2 Antibody - Protein Information

## Name ZFP36L2 (HGNC:1108)

## **Function**

Zinc-finger RNA-binding protein that destabilizes several cytoplasmic AU-rich element (ARE)-containing mRNA transcripts by promoting their poly(A) tail removal or deadenylation, and hence provide a mechanism for attenuating protein synthesis (PubMed:<a href="http://www.uniprot.org/citations/14981510" target="\_blank">14981510</a>, PubMed:<a href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/34611029" target="\_blank">34611029</a>). Acts as a 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:<a href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>). Functions by recruiting the CCR4-NOT deadenylase complex and probably other components of the cytoplasmic RNA decay machinery to the bound ARE-containing mRNAs, and hence promotes ARE-mediated mRNA deadenylation and decay



processes (PubMed: <a href="http://www.uniprot.org/citations/25106868" target=" blank">25106868</a>). Binds to 3'-UTR ARE of numerous mRNAs (PubMed:<a  $href="http://www.uniprot.org/citations/14981510" target="\_blank">14981510</a>, PubMed:<a href="http://www.uniprot.org/citations/20506496" target="\_blank">20506496</a>, PubMed:<a href="http://www.uniprot.org/citations/20506496" target="_blank">20506496</a>, PubMed:<a href="http://www.uniprot.org/citations/20506496" target="_blank">205066666</a>, PubMed$ href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>). Promotes ARE- containing mRNA decay of the low-density lipoprotein (LDL) receptor (LDLR) mRNA in response to phorbol 12-myristate 13-acetate (PMA) treatment in a p38 MAPK-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/25106868" target=" blank">25106868</a>). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate early genes (IEGs). Plays a role in mature peripheral neuron integrity by promoting ARE-containing mRNA decay of the transcriptional repressor REST mRNA. Plays a role in ovulation and oocyte meiotic maturation by promoting ARE-mediated mRNA decay of the luteinizing hormone receptor LHCGR mRNA. Acts as a negative regulator of erythroid cell differentiation: promotes glucocorticoid-induced self-renewal of erythroid cells by binding mRNAs that are induced or highly expressed during terminal erythroid differentiation and promotes their degradation, preventing erythroid cell differentiation. In association with ZFP36L1 maintains quiescence on developing B lymphocytes by promoting ARE-mediated decay of several mRNAs encoding cell cycle regulators that help B cells progress through the cell cycle, and hence ensuring accurate variable-diversity-joining (VDJ) recombination process and functional immune cell formation. Together with ZFP36L1 is also necessary for thymocyte development and prevention of T-cell acute lymphoblastic leukemia (T-ALL) transformation by promoting ARE-mediated mRNA decay of the oncogenic transcription factor NOTCH1 mRNA.

#### **Cellular Location**

Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1-dependent manner {ECO:0000250|UniProtKB:P23949}

#### **Tissue Location**

Expressed mainly in the basal epidermal layer, weakly in the suprabasal epidermal layers (PubMed:27182009). Expressed in epidermal keratinocytes (at protein level) (PubMed:27182009) Expressed in oocytes (PubMed:34611029).

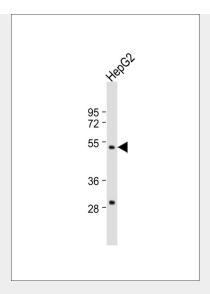
## **ZFP36L2 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## ZFP36L2 Antibody - Images





Anti-ZFP36L2 Antibody at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# **ZFP36L2 Antibody - Background**

mRNA-binding protein that plays a key role in self- renewal of erythroid cells in response to glucocorticoids. Specifically binds to the AU-rich element (ARE) in the 3'-UTR of target mRNAs, promoting their deadenylation and degradation (PubMed:14981510). Specifically expressed in burst-forming unit- erythroid (BFU-E) progenitors in response to glucocorticoids and acts as a negative regulator of erythroid cell differentiation: promotes self-renewal of erythroid cells by binding mRNAs that are induced or highly expressed during terminal erythroid differentiation and promotes their degradation, preventing erythroid cell differentiation. Down-regulated during erythroid differentiation from the BFU-E stage, stabilizing mRNAs required for terminal differentiation (By similarity).

## **ZFP36L2 Antibody - References**

Ino T.,et al.Oncogene 11:2705-2710(1995).
Nie X.F.,et al.Gene 152:285-286(1995).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).