

# ZFP36L2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17671C

## **Product Information**

Application WB, E Primary Accession P47974

Other Accession P23949, <u>0805B4</u>, <u>077XW9</u>, <u>P17431</u>, <u>P23950</u>, <u>007352</u>, <u>NP 008818.3</u>

Reactivity Human, Mouse **Predicted** Rat, Xenopus Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB37481 51063 **Calculated MW Antigen Region** 166-193

# **Additional Information**

Gene ID 678

**Other Names** Zinc finger protein 36, C3H1 type-like 2, ZFP36-like 2, Butyrate response factor

2, EGF-response factor 2, ERF-2, Protein TIS11D, ZFP36L2, BRF2, ERF2,

RNF162C, TIS11D

**Target/Specificity** This ZFP36L2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 166-193 amino acids from the Central

region of human ZFP36L2.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**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** ZFP36L2 Antibody (Center) is for research use only and not for use in

diagnostic or therapeutic procedures.

## **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:14981510, PubMed:25106868, PubMed:34611029). Acts as a 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:25106868). 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:25106868). Binds to 3'-UTR ARE of numerous mRNAs (PubMed: 14981510, PubMed: 20506496, PubMed: 25106868). Promotes AREcontaining 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: 25106868). 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).

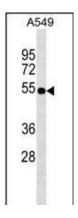
# **Background**

This gene is a member of the TIS11 family of early response genes. Family members are induced by various agonists such as the phorbol ester TPA and the polypeptide mitogen EGF. The encoded protein contains a distinguishing putative zinc finger domain with a repeating cys-his motif. This putative nuclear transcription factor most likely functions in regulating the response to growth factors.

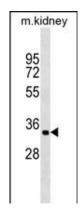
# References

Morgan, B.R., et al. Protein Sci. 19(6):1222-1234(2010) Jackson, R.S. II, et al. Cell Cycle 5(24):2889-2893(2006) Hudson, B.P., et al. Nat. Struct. Mol. Biol. 11(3):257-264(2004) Blackshear, P.J., et al. Prog. Nucleic Acid Res. Mol. Biol. 75, 43-68 (2003): Ino, T., et al. Oncogene 11(12):2705-2710(1995)

# **Images**



ZFP36L2 Antibody (Center) (Cat. #AP17671c) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the ZFP36L2 antibody detected the ZFP36L2 protein (arrow).



ZFP36L2 Antibody (Center) (Cat. #AP17671c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the ZFP36L2 antibody detected the ZFP36L2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.