

### ZFP36L1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19809a

# **Specification**

### ZFP36L1 Antibody(N-term) - Product Information

Application WB,E
Primary Accession Q07352

Other Accession <u>P17431</u>, <u>P23950</u>, <u>NP\_004917.2</u>

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rat
Rabbit
Rabbit
Rabbit
Additional
Rabbit IgG
Additional
Rabbit IgG
Additional
Rabbit IgG
Additional
Rabbit IgG
Additional
A

# ZFP36L1 Antibody(N-term) - Additional Information

#### Gene ID 677

### **Other Names**

Zinc finger protein 36, C3H1 type-like 1, Butyrate response factor 1, EGF-response factor 1, ERF-1, Protein TIS11B, ZFP36L1, BERG36, BRF1, ERF1, RNF162B, TIS11B

### Target/Specificity

This ZFP36L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 64-93 amino acids from the N-terminal region of human ZFP36L1.

#### **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**

ZFP36L1 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ZFP36L1 Antibody(N-term) - Protein Information

Name ZFP36L1 (HGNC:1107)



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:12198173, PubMed:15467755, PubMed:15538381, PubMed:17030608, PubMed:19179481, PubMed:20702587, PubMed:24700863, PubMed:25014217, PubMed:25106868, PubMed:26542173). Acts as a 3'-untranslated region (UTR) ARE mRNA- binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:15687258). Functions by recruiting the CCR4-NOT deadenylase complex and components of the cytoplasmic RNA decay machinery to the bound ARE-containing mRNAs, and hence promotes ARE- mediated mRNA deadenylation and decay processes (PubMed:15687258, PubMed:18326031, PubMed:25106868). Also induces the degradation of ARE- containing mRNAs even in absence of poly(A) tail (By similarity). Binds to 3'-UTR ARE of numerous mRNAs (PubMed:12198173, PubMed:15467755, PubMed:15538381, PubMed:17030608, PubMed:19179481, PubMed:20702587, PubMed:24700863, PubMed:25014217, PubMed:25106868, PubMed:26542173). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of interior in mediate early genes

(IEGs) (By similarity). Promotes ARE- mediated mRNA decay of mineralocorticoid receptor NR3C2 mRNA in response to hypertonic stress (PubMed: 24700863). Negatively regulates hematopoietic/erythroid cell differentiation by promoting ARE-mediated mRNA decay of the transcription factor STAT5B mRNA (PubMed: 20702587). Positively regulates monocyte/macrophage cell differentiation by promoting ARE-mediated mRNA decay of the cyclin-dependent kinase CDK6 mRNA (PubMed: 26542173). Promotes degradation of ARE-containing pluripotency-associated mRNAs in embryonic stem cells (ESCs), such as NANOG, through a fibroblast growth factor (FGF)-induced MAPK-dependent signaling pathway, and hence attenuates ESC self-renewal and positively regulates mesendoderm differentiation (By similarity). May play a role in mediating pro-apoptotic effects in malignant B-cells by promoting ARE-mediated mRNA decay of BCL2 mRNA (PubMed: 25014217). In association with ZFP36L2 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 and functional immune cell formation (By similarity). Together with ZFP36L2 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 (By similarity). Participates in the delivery of target ARE-mRNAs to processing bodies (PBs) (PubMed: 17369404). In addition to its cytosolic mRNA-decay function, plays a role in the regulation of nuclear mRNA 3'- end processing; modulates mRNA 3'-end maturation efficiency of the DLL4 mRNA through binding with an ARE embedded in a weak noncanonical polyadenylation (poly(A)) signal in endothelial cells (PubMed: 21832157). Also involved in the regulation of stress granule (SG) and P-body (PB) formation and fusion (PubMed: 15967811). Plays a role in vasculogenesis and endocardial development (By similarity). Plays a role in the regulation of keratinocyte proliferation, differentiation and apoptosis (PubMed: 27182009). Plays a role in myoblast cell differentiation (By

#### **Cellular Location**

similarity).

Nucleus. Cytoplasm. Cytoplasmic granule. Cytoplasm, P-body Note=Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1- dependent manner (By similarity). Component of cytoplasmic stress granules (PubMed:15967811). Localizes in processing bodies (PBs) (PubMed:17369404). {ECO:0000250|UniProtKB:P23950, ECO:0000269|PubMed:15967811, ECO:0000269|PubMed:17369404}

#### **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 osteoblasts (PubMed:15465005)

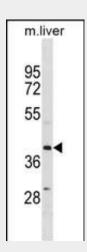
### ZFP36L1 Antibody(N-term) - Protocols



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

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

### ZFP36L1 Antibody(N-term) - Images



ZFP36L1 Antibody (N-term) (Cat. #AP19809a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the ZFP36L1 antibody detected the ZFP36L1 protein (arrow).

## ZFP36L1 Antibody(N-term) - 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 gene is well conserved across species and has a promoter that contains motifs seen in other early-response genes. 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.

# ZFP36L1 Antibody(N-term) - References

Hacker, C., et al. Growth Factors 28(3):178-190(2010) Dubois, P.C., et al. Nat. Genet. 42(4):295-302(2010) Sinha, S., et al. J. Biol. Chem. 284(47):32610-32618(2009) Cheng, Z., et al. Genes Dev. 23(9):1106-1118(2009) Baou, M., et al. Leukemia 23(5):986-989(2009)