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Zfp36l1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14219

Product Information

Application	WB
Primary Accession	P23950
Other Accession	NM_007564, NP_031590
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Zebrafish, Pig, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36385

Additional Information

Gene ID	12192
Alias Symbol	AW742437, AW743212, Berg36, Brf1, D530020L18Rik, ERF1, TIS11b, cMG1
Other Names	Zinc finger protein 36, C3H1 type-like 1, Butyrate response factor 1, Protein TIS11B, Zfp36l1, Brf1, Tis11b
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Zfp36l1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Zfp36l1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Zfp36l1 {ECO:0000312|MGI:MGI:107946}
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:22701344, PubMed:24700863, PubMed:24733888, PubMed:27102483). Acts as a 3'- untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (By similarity). Functions by recruiting the CCR4-NOT deadenylating 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 (By similarity). 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:22701344, PubMed:24700863, PubMed:24733888). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate early genes (IEGs) (PubMed:22701344). 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 (By similarity). Positively regulates monocyte/macrophage cell differentiation by promoting ARE-mediated mRNA decay of the cyclin-dependent kinase CDK6 mRNA (By similarity). 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 (PubMed:24733888). May play a role in mediating pro-apoptotic effects in malignant B-cells by promoting ARE-mediated mRNA decay of BCL2 mRNA (By similarity). 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 (PubMed:27102483). 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 (PubMed:20622884). Involved in the delivery of target ARE-mRNAs to processing bodies (PBs) (By similarity). 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 (By similarity). Also involved in the regulation of stress granule (SG) and P-body (PB) formation and fusion (By similarity). Plays a role in vasculogenesis and endocardial development (PubMed:15226444, PubMed:17013884). Involved in the regulation of keratinocyte proliferation, differentiation and apoptosis (By similarity). Plays a role in myoblast cell differentiation (PubMed:17889962).

Cellular Location

Nucleus. Cytoplasm. Cytoplasmic granule {ECO:0000250|UniProtKB:Q07352}. Cytoplasm, P-body {ECO:0000250|UniProtKB:Q07352}. Note=Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1-dependent manner (PubMed:11796723) Component of cytoplasmic stress granules (By similarity). Localizes in processing bodies (PBs) (By similarity). {ECO:0000250|UniProtKB:Q07352, ECO:0000269|PubMed:11796723}

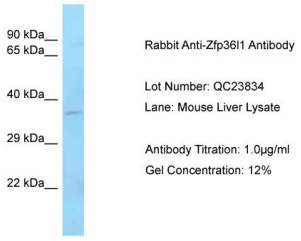
Tissue Location

Expressed in preadipocytes and adipocytes (PubMed:22701344). Expressed in the proximal and distal tubules in the renal cortex (at protein level) (PubMed:24700863). Expressed in ovary, heart, kidney, lung, spleen and thymus (PubMed:15226444). Weakly expressed in brain, liver and testis (PubMed:15226444). Expressed in osteoblasts (PubMed:15465005). Expressed in embryonic stem cells (ESCs) (PubMed:24733888). Expressed through B lymphocyte development (PubMed:27102483).

References

Varnum B.C.,et al.Mol. Cell. Biol. 11:1754-1758(1991).
Phillips R.S.,et al.J. Biol. Chem. 277:11606-11613(2002).
Hodson D.J.,et al.Nat. Immunol. 11:717-724(2010).

Images



Host: Rabbit
Target Name: Zfp36I1
Sample Tissue: Mouse Liver
Antibody Dilution: 1.0µg/ml

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