

TIS11B Polyclonal Antibody

Catalog # AP72851

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q07352
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36314

Additional Information

Gene ID	677
Other Names	ZFP36L1; BERG36; BRF1; ERF1; RNF162B; TIS11B; Zinc finger protein 36; C3H1 type-like 1; Butyrate response factor 1; EGF-response factor 1; ERF-1; Protein TIS11B
Dilution	WB--Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P--N/A IF--1:50~200 ICC--N/A E--N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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 immediate 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 similarity).

Cellular Location

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

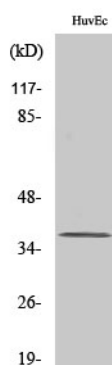
Expressed mainly in the basal epidermal layer, weakly in the suprabasal epidermal layers (PubMed:[27182009](#)). Expressed in epidermal keratinocytes (at protein level) (PubMed:[27182009](#)) Expressed in osteoblasts (PubMed:[15465005](#))

Background

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:[15538381](#), PubMed:[15467755](#), PubMed:[17030608](#), PubMed:[19179481](#), PubMed:[20702587](#), PubMed:[24700863](#), PubMed:[25106868](#), PubMed:[25014217](#), 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](#)). Induces also 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:[15538381](#), PubMed:[15467755](#), PubMed:[17030608](#), PubMed:[19179481](#), PubMed:[20702587](#), PubMed:[24700863](#), PubMed:[25106868](#), PubMed:[25014217](#), PubMed:[26542173](#)). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate 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 similarity).

Images



Western Blot analysis of various cells using TIS11B Polyclonal Antibody. Secondary antibody was diluted at 1:20000

Citations

- [Identification of a novel iron zinc finger protein 36 \(ZFP36\) for predicting the overall survival of osteosarcoma based on the Gene Expression Omnibus \(GEO\) database](#)

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