

## **TIS11B Polyclonal Antibody**

**Catalog # AP72851** 

## **Specification**

## **TIS11B Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession Q07352

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

## TIS11B Polyclonal Antibody - 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~ $\sim$ N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

## **TIS11B Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/12198173" target="\_blank">12198173</a>, PubMed:<a href="http://www.uniprot.org/citations/15467755" target="\_blank">15467755</a>, PubMed:<a href="http://www.uniprot.org/citations/15538381" target="\_blank">15538381</a>, PubMed:<a href="http://www.uniprot.org/citations/17030608" target="\_blank">17030608</a>, PubMed:<a href="http://www.uniprot.org/citations/19179481" target="\_blank">19179481</a>, PubMed:<a href="http://www.uniprot.org/citations/20702587" target="\_blank">20702587</a>, PubMed:<a href="http://www.uniprot.org/citations/24700863" target="\_blank">24700863</a>, PubMed:<a href="http://www.uniprot.org/citations/25014217" target="\_blank">25014217</a>, PubMed:<a href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/26542173" target="\_blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/26542173" target="\_blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/26542173" target="\_blank">26542173</a>, Acts as a



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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/15687258" target=" blank">15687258</a>). 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: <a href="http://www.uniprot.org/citations/15687258" target=" blank">15687258</a>, PubMed:<a href="http://www.uniprot.org/citations/18326031" target=" blank">18326031</a>, PubMed:<a href="http://www.uniprot.org/citations/25106868" target="\_blank">25106868</a>). 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: <a href="http://www.uniprot.org/citations/12198173" target=" blank">12198173</a>, PubMed:<a href="http://www.uniprot.org/citations/15467755" target="blank">15467755</a>, PubMed:<a href="http://www.uniprot.org/citations/15538381" target="blank">15538381</a>, PubMed:<a href="http://www.uniprot.org/citations/17030608" target="blank">17030608</a>, PubMed:<a href="http://www.uniprot.org/citations/19179481" target="blank">19179481</a>, PubMed:<a href="http://www.uniprot.org/citations/20702587" target="blank">20702587</a>, PubMed:<a href="http://www.uniprot.org/citations/24700863" target="blank">24700863</a>, PubMed:<a href="http://www.uniprot.org/citations/25014217" target="\_blank">25014217</a>, PubMed:<a href="http://www.uniprot.org/citations/25106868" target=" blank">25106868</a>, PubMed:<a href="http://www.uniprot.org/citations/26542173" target="blank">26542173</a>). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate early genes (IEGs) (By similarity). Promotes AREmediated mRNA decay of mineralocorticoid receptor NR3C2 mRNA in response to hypertonic stress (PubMed:<a href="http://www.uniprot.org/citations/24700863" target=" blank">24700863</a>). Negatively regulates hematopoietic/erythroid cell differentiation by promoting ARE-mediated mRNA decay of the transcription factor STAT5B mRNA (PubMed:<a href="http://www.uniprot.org/citations/20702587" target=" blank">20702587</a>). Positively regulates monocyte/macrophage cell differentiation by promoting ARE-mediated mRNA decay of the cyclin-dependent kinase CDK6 mRNA (PubMed:<a href="http://www.uniprot.org/citations/26542173" target=" blank">26542173</a>). 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:<a href="http://www.uniprot.org/citations/25014217" target=" blank">25014217</a>). 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: <a href="http://www.uniprot.org/citations/17369404" target=" blank">17369404</a>). 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:<a href="http://www.uniprot.org/citations/21832157" target=" blank">21832157</a>). Also involved in the regulation of stress granule (SG) and P-body (PB) formation and fusion (PubMed: <a href="http://www.uniprot.org/citations/15967811" target="blank">15967811</a>). Plays a role in vasculogenesis and endocardial development (By similarity). Plays a role in the regulation of keratinocyte proliferation, differentiation and apoptosis (PubMed:<a href="http://www.uniprot.org/citations/27182009" target="\_blank">27182009</a>). Plays a role in myoblast cell differentiation (By similarity).

#### **Cellular Location**

Nucleus. Cytoplasm. Cytoplasmic granule. Cytoplasm, P-body Note=Shuttles between the nucleus





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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**

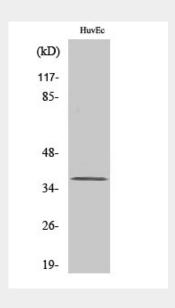
Expressed mainly in the basal epidermal layer, weakly in the suprabasal epidermal layers (PubMed:27182009). Expressed in epidermal keratinocytes (at protein level) (PubMed:27182009) Expressed in osteoblasts (PubMed:15465005)

## **TIS11B Polyclonal Antibody - Protocols**

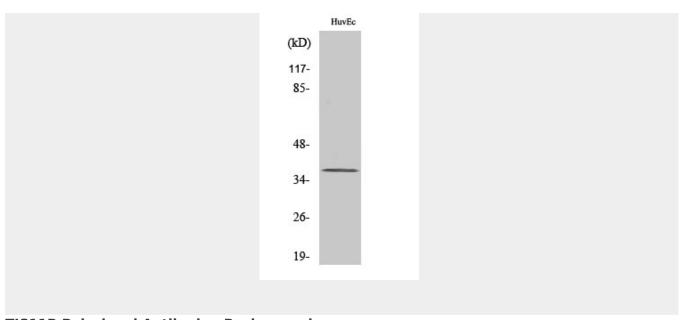
Provided below are standard protocols that you may find useful for product applications.

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

#### **TIS11B Polyclonal Antibody - Images**



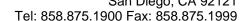




**TIS11B Polyclonal Antibody - Background** 

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







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# **TIS11B Polyclonal Antibody - 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