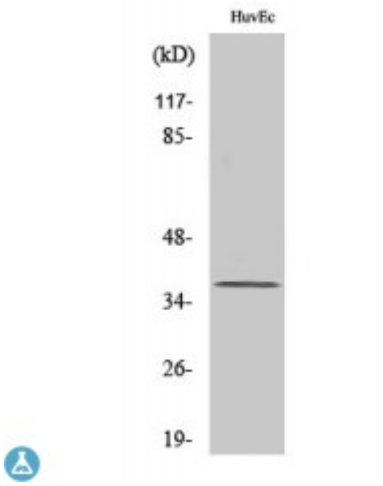
Anti-TIS11B antibody



Description	Rabbit polyclonal to TIS11B.

Model	STJ96033
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human TIS11B around the non-phosphorylation site of S92.
Immunogen Region	30-110 aa
Gene ID	677
Gene Symbol	ZFP36L1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000
Specificity	TIS11B Polyclonal Antibody detects endogenous levels of TIS11B protein.
Tissue Specificity	Expressed mainly in the basal epidermal layer, weakly in the suprabasal epidermal layers . Expressed in epidermal keratinocytes (at protein level) . Expressed in osteoblasts .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	mRNA decay activator protein ZFP36L1 Butyrate response factor 1 EGF-response factor 1 ERF-1 TPA-induced sequence 11b Zinc finger protein 36, C3H1 type-like 1 ZFP36-like 1

Molecular Weight	36 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1107OMIM:601064
Alternative Names	mRNA decay activator protein ZFP36L1 Butyrate response factor 1 EGF-response factor 1 ERF-1 TPA-induced sequence 11b Zinc finger protein 36, C3H1 type-like 1 ZFP36-like 1
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 . Acts as a 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery . 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 . Induces also the degradation of ARE-containing mRNAs even in absence of poly(A) tail . Binds to 3'-UTR ARE of numerous mRNAs . Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate early genes (IEGs) . Promotes ARE-mediated mRNA decay of mineralocorticoid receptor NR3C2 mRNA in response to hypertonic stress . Negatively regulates hematopoietic/erythroid cell differentiation by promoting ARE-mediated mRNA decay of the transcription factor STAT5B mRNA . Positively regulates monocyte/macrophage cell differentiation by promoting ARE-mediated mRNA decay of the cyclin-dependent kinase CDK6 mRNA . 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 . May play a role in mediating pro-apoptotic effects in malignant B-cells by promoting ARE-mediated mRNA decay of BCL2 mRNA . 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 . 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 . Participates in the delivery of target ARE-mRNAs to processing bodies (PBs) . 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 . Also involved in the regulation of stress granule (SG) and

	P-body (PB) formation and fusion . Plays a role in vasculogenesis and endocardial development . Plays a role in the regulation of keratinocyte proliferation, differentiation and apoptosis . Plays a role in myoblast cell differentiation .
Cellular Localization	Nucleus Cytoplasm Cytoplasmic granule Cytoplasm, P-body. Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1-dependent manner . Component of cytoplasmic stress granules . Localizes in processing bodies (PBs) .
Post-translational Modifications	Phosphorylated . Phosphorylated by RPS6KA1 at Ser-334 upon phorbol 12-myristate 13-acetate (PMA) treatment; this phosphorylation results in dissociation of the CCR4-NOT deadenylase complex and induces p38 MAPK-mediated stabilization of the low-density lipoprotein receptor LDLR mRNA . Phosphorylated by protein kinase AKT1 at Ser-92 and Ser-203 in response to insulin; these phosphorylations stabilize ZFP36L1, increase the association with 14-3-3 proteins and mediate ARE-containing mRNA stabilization . AKT1-mediated phosphorylation at Ser-92 does not impair ARE-containing RNA-binding . Phosphorylated at Ser-54, Ser-92 and Ser-203 by MAPKAPK2; these phosphorylations increase the association with 14-3-3 proteins and mediate ARE-containing mRNA stabilization in a protein kinase AKT1-independent manner . MAPKAPK2-mediated phosphorylations at Ser-54, Ser-92 and Ser-203 do not impair ARE-containing RNA-binding . Phosphorylations increase the association with 14-3-3 proteins and mediate ARE-containing mRNA stabilization during early adipogenesis in a p38 MAPK- and AKT-dependent manner . Ubiquitinated. Ubiquitination leads to proteasomal degradation, a process inhibited by phosphorylations at Ser-90, Ser-92 and Ser-203 .