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ZFP36L2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53380

Product Information

Application	WB
Primary Accession	P47974
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51063

Additional Information

Gene ID	678
Other Names	Zinc finger protein 36, C3H1 type-like 2, ZFP36-like 2, Butyrate response factor 2, EGF-response factor 2, ERF-2, Protein TIS11D, ZFP36L2, BRF2, ERF2, RNF162C, TIS11D
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZFP36L2. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ZFP36L2 (HGNC:1108)
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:14981510, PubMed:25106868, PubMed:34611029). Acts as a 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:25106868). Functions by recruiting the CCR4-NOT deadenylase complex and probably other components of the cytoplasmic RNA decay machinery to the bound ARE-containing mRNAs, and hence promotes ARE-mediated mRNA deadenylation and decay processes (PubMed:25106868). Binds to 3'-UTR ARE of numerous mRNAs (PubMed:14981510, PubMed:20506496, PubMed:25106868). Promotes ARE-containing mRNA decay of the low-density lipoprotein (LDL) receptor (LDLR)

	mRNA in response to phorbol 12-myristate 13-acetate (PMA) treatment in a p38 MAPK-dependent manner (PubMed:25106868). Positively regulates early adipogenesis by promoting ARE-mediated mRNA decay of immediate early genes (IEGs). Plays a role in mature peripheral neuron integrity by promoting ARE-containing mRNA decay of the transcriptional repressor REST mRNA. Plays a role in ovulation and oocyte meiotic maturation by promoting ARE-mediated mRNA decay of the luteinizing hormone receptor LHCGR mRNA. Acts as a negative regulator of erythroid cell differentiation: promotes glucocorticoid-induced self-renewal of erythroid cells by binding mRNAs that are induced or highly expressed during terminal erythroid differentiation and promotes their degradation, preventing erythroid cell differentiation. In association with ZFP36L1 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 process and functional immune cell formation. Together with ZFP36L1 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.
Cellular Location	Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1-dependent manner {ECO:0000250|UniProtKB:P23949}
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 oocytes (PubMed:34611029).

Background

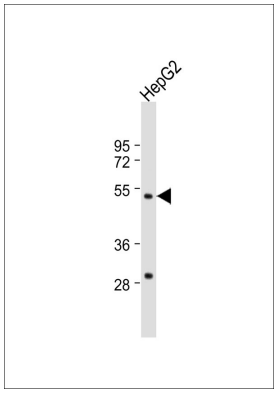
mRNA-binding protein that plays a key role in self- renewal of erythroid cells in response to glucocorticoids. Specifically binds to the AU-rich element (ARE) in the 3'-UTR of target mRNAs, promoting their deadenylation and degradation (PubMed:14981510). Specifically expressed in burst-forming unit-erythroid (BFU-E) progenitors in response to glucocorticoids and acts as a negative regulator of erythroid cell differentiation: promotes self-renewal of erythroid cells by binding mRNAs that are induced or highly expressed during terminal erythroid differentiation and promotes their degradation, preventing erythroid cell differentiation. Down-regulated during erythroid differentiation from the BFU-E stage, stabilizing mRNAs required for terminal differentiation (By similarity).

References

Ino T.,et al.Oncogene 11:2705-2710(1995).
Nie X.F.,et al.Gene 152:285-286(1995).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).

Images

Anti-ZFP36L2 Antibody at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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