

# CUGBP1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14036a

### **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>Q92879</u>
Other Accession	<u>Q4QQT3, P28659, Q5F3T7, NP_001166110.1, NP_001020767.1, NP_941989.1</u> ,
	<u>NP_001166111.1</u>
Reactivity	Human
Predicted	Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34074
Calculated MW	52063
Antigen Region	1-30

#### **Additional Information**

Gene ID	10658
Other Names	CUGBP Elav-like family member 1, CELF-1, 50 kDa nuclear polyadenylated RNA-binding protein, Bruno-like protein 2, CUG triplet repeat RNA-binding protein 1, CUG-BP1, CUG-BP- and ETR-3-like factor 1, Deadenylation factor CUG-BP, Embryo deadenylation element-binding protein homolog, EDEN-BP homolog, RNA-binding protein BRUNOL-2, CELF1, BRUNOL2, CUGBP, CUGBP1, NAB50
Target/Specificity	This CUGBP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CUGBP1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CUGBP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name Synonyms Function	CELF1 BRUNOL2, CUGBP, CUGBP1, NAB50 RNA-binding protein implicated in the regulation of several post-transcriptional events. Involved in pre-mRNA alternative splicing, mRNA translation and stability. Mediates exon inclusion and/or exclusion in pre-mRNA that are subject to tissue-specific and developmentally regulated alternative splicing. Specifically activates exon 5 inclusion of cardiac isoforms of TNNT2 during heart remodeling at the juvenile to adult transition. Acts both as an activator and as a repressor of a pair of coregulated exons: promotes inclusion of the smooth muscle (SM) exon but exclusion of the non-muscle (NM) exon in actinin pre-mRNAs. Activates SM exon 5 inclusion by antagonizing the repressive effect of PTB. Promotes exclusion of exon 11 of the INSR pre-mRNA. Inhibits, together with HNRNPH1, insulin receptor (IR) pre-mRNA exon 11 inclusion in myoblast. Increases translation and controls the choice of translation initiation codon of CEBPB mRNA. Increases mRNA translation of CEBPB in aging liver (By similarity). Increases translation of CDKN1A mRNA by antagonizing the repressive effect of CALR3. Mediates rapid cytoplasmic mRNA deadenylation. Recruits the deadenylase PARN to the poly(A) tail of EDEN-containing mRNAs to promote their deadenylation. Required for completion of spermatogenesis (By similarity). Binds to (CUG)n triplet repeats in the 3'-UTR of transcripts such as DMPK and to Bruno response elements (BREs). Binds to muscle-specific splicing enhancer (MSE) intronic sites flanking the alternative exon 5 of TNNT2 pre-mRNA. Binds to AU-rich sequences (AREs or EDEN-like) localized in the 3'-UTR of JUN and FOS mRNAs. Binds to the IR RNA. Binds to the 5'-region of CDKN1A and CEBPB mRNAs. Binds with the 5'-region of CEBPB mRNA in aging liver. May be a specific regulator of miRNA biogenesis. Binds to primary microRNA pri-MIR140 and, with CELF2, negatively regulates the processing to mature miRNA (PubMed: 2843123).
Tissue Location	and cytoplasmic compartments Ubiquitous.

#### Background

Members of the CELF/BRUNOL protein family contain two N-terminal RNA recognition motif (RRM) domains, one C-terminal RRM domain, and a divergent segment of 160-230 aa between the second and third RRM domains. Members of this protein family regulate pre-mRNA alternative splicing and may also be involved in mRNA editing, and translation. This gene may play a role in myotonic dystrophy type 1 (DM1) via interactions with the dystrophia myotonica-protein kinase (DMPK) gene. Alternative splicing results in multiple transcript variants encoding different isoforms.

## References

Rattenbacher, B., et al. Mol. Cell. Biol. 30(16):3970-3980(2010) Le Tonqueze, O., et al. Biochem. Biophys. Res. Commun. 394(4):884-889(2010) Koshelev, M., et al. Hum. Mol. Genet. 19(6):1066-1075(2010) Tsuda, K., et al. Nucleic Acids Res. 37(15):5151-5166(2009) Bubenik, J.L., et al. RNA Biol 6(1):73-83(2009)

#### Images



CUGBP1 Antibody (N-term) (Cat. #AP14036a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the CUGBP1 antibody detected the CUGBP1 protein (arrow).



CUGBP1 Antibody (N-term) (AP14036a)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CUGBP1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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