



Rabbit Anti-CUG-BP1 antibody

SL20525R

Product Name:	CUG-BP1
Chinese Name:	胞苷尿苷鸟苷Binding protein1 抗体
Alias:	Bruno like 2; bruno like protein 2; Bruno-like protein 2; BRUNOL 2; BRUNOL2; CELF 1; CELF-1; celf1; CELF1 CUGBP, Elav like family member 1; CELF1_HUMAN; CUG BP and ETR 3 like factor 1; CUG BP; CUG BP1; CUG RNA binding protein; CUG triplet repeat RNA binding protein 1; CUG triplet repeat RNA-binding protein 1; CUG-BP; CUG-BP- and ETR-3-like factor 1; CUG-BP1; CUGBP 1; CUGBP and ETR3 like factor 1; CUGBP; CUGBP Elav like family member 1; CUGBP Elav-like family member 1; CUGBP1; Cytidine uridine guanosine binding protein 1; Deadenylation factor CUG BP; Deadenylation factor CUG-BP; Deadenylation factor CUGBP; EDEN BP; EDEN BP homolog; EDEN-BP; EDEN-BP homolog; embryo deadenylation element binding protein; embryo deadenylation element binding protein homolog; Embryo deadenylation element-binding protein homolog; hNab 50; hNab50; NAB 50; NAB50; NAPOR; Nuclear polyadenylated RNA binding protein 50 kDa; Nuclear polyadenylated RNA binding protein; RNA binding protein BRUNOL 2; RNA binding protein BRUNOL2; RNA-binding protein BRUNOL-2; 50 kDa Nuclear polyadenylated RNA binding protein; 50 kDa nuclear polyadenylated RNA-binding protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	52kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CUG-BP1:1-100/486

Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Myotonic dystrophy (DM) is an autosomal dominant neuromuscular disease that is associated with a (CTG)_n repeat expansion in the 3'-untranslated region of the myotonin protein kinase gene (DMPK). CUG-BP1 and CUG-BP2 are proteins that bind specifically to (CUG)₈ oligonucleotides in vitro. While CUG-BP1 has the major binding activity in normal cells, nuclear CUG-BP2 binding activity increases in DM cells. Both CUG-BP1 and CUG-BP2 are isoforms of a novel heterogeneous nuclear ribonucleoprotein (hnRNP), hnRNP50. CUG-BP1, an RNA CUG triplet repeat binding protein, regulates splicing and translation of various RNAs. Expansion of RNA CUG repeats in the DMPK in DM is associated with alterations in binding activity of CUG-BP1 as well as alterations in the translation of the C/EBPβ transcription factor. CUG-BP1 is an important regulator of initiation from different AUG codons of C/EBPβ mRNA. In normal cells, CUG-BP1 up-regulates the p21 protein during differentiation by inducing the translation of p21 via binding to a GC-rich sequence located within the 5' region of p21 mRNA. In DM cells, failure to accumulate CUG-BP1 leads to a reduction of p21 and alterations in other proteins responsible for cell cycle withdrawal.</p> <p>Function: 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 as both an activator and 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'-</p>

region of CEBPB mRNA in aging liver.

Subunit:

Component of an EIF2 complex at least composed of CELF1/CUGBP1, CALR, CALR3, EIF2S1, EIF2S2, HSP90B1 and HSPA5. Associates with polysomes (By similarity). Interacts with HNRNPH1; the interaction in RNA-dependent. Interacts with PARN.

Subcellular Location:

Nucleus. Cytoplasm. RNA-binding activity is detected in both nuclear and cytoplasmic compartments.

Tissue Specificity:

Ubiquitous.

Post-translational modifications:

Phosphorylated. Its phosphorylation status increases in senescent cells.

Similarity:

Belongs to the CELF/BRUNOL family.
Contains 3 RRM (RNA recognition motif) domains.

SWISS:

Q92879

Gene ID:

10658

Database links:

[Entrez Gene: 10658](#)Human

[Entrez Gene: 13046](#)Mouse

[Entrez Gene: 362160](#)Rat

[Omim: 601074](#)Human

[SwissProt: Q92879](#)Human

[SwissProt: P28659](#)Mouse

[SwissProt: Q4QQT3](#)Rat

[Unigene: 595333](#)Human

[Unigene: 29495](#)Mouse

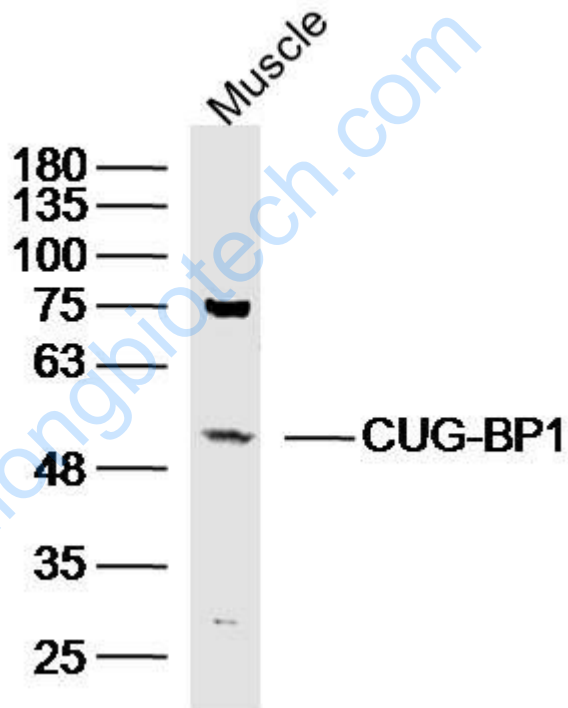
[Unigene: 393354](#)Mouse

[Unigene: 22432](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample: Muscle (Mouse) Lysate at 40 ug

Primary: Anti-CUG-BP1(SL20525R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 52kD

Observed band size: 52kD