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CUGBP1 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP14036a

Specification

CUGBP1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q92879

CUGBP1 Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP14036a was selected from the N-term region of CUGBP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CUGBP1 Antibody (N-term) Blocking peptide - Protein Information

Name CELF1

Synonyms BRUNOL2, CUGBP, CUGBP1, NAB50

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 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:28431233).

Cellular Location
Nucleus. Cytoplasm. Note=RNA-binding activity is detected in both nuclear and cytoplasmic compartments

Tissue Location
Ubiquitous.

CUGBP1 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

CUGBP1 Antibody (N-term) Blocking peptide - Images

CUGBP1 Antibody (N-term) Blocking peptide - Background

Members of the CELF/BRUNOL protein family contain twoN-terminal RNA recognition motif (RRM) domains, one C-terminal RRMdomain, and a divergent segment of 160-230 aa between the secondand third RRM domains. Members of this protein family regulatepre-mRNA alternative splicing and may also be involved in mRNAediting, and translation. This gene may play a role in myotonicdystrophy type 1 (DM1) via interactions with the dystrophiamyotonica-protein kinase (DMPK) gene. Alternative splicing resultsin multiple transcript variants encoding different isoforms.

CUGBP1 Antibody (N-term) Blocking peptide - 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)