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CUGBP2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17229b

Specification

CUGBP2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O95319

CUGBP2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10659

Other Names
CUGBP Elav-like family member 2, CELF-2, Bruno-like protein 3, CUG triplet repeat RNA-binding protein 2, CUG-BP2, CUG-BP- and ETR-3-like factor 2, ELAV-type RNA-binding protein 3, ETR-3, Neuroblastoma apoptosis-related RNA-binding protein, hNAPOR, RNA-binding protein BRUNOL-3, CELF2, BRUNOL3, CUGBP2, ETR3, NAPOR

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.

CUGBP2 Antibody (C-term) Blocking Peptide - Protein Information

Name CELF2

Synonyms BRUNOL3, CUGBP2, ETR3, NAPOR

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 TNNT2 in embryonic, but not adult, skeletal muscle. Activates TNNT2 exon 5 inclusion by antagonizing the repressive effect of PTB. 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. Promotes inclusion of exonS 21 and exclusion of exon 5 of the NMDA receptor R1 pre-mRNA. Involved in the apoB RNA editing activity. Increases COX2 mRNA stability and inhibits COX2 mRNA translation in epithelial cells after radiation injury (By similarity). Modulates the cellular apoptosis program by regulating COX2-mediated prostaglandin E2 (PGE2) expression (By similarity). Binds to (CUG)n triplet repeats in the 3'-UTR of transcripts such as DMPK. Binds to the muscle-specific splicing enhancer (MSE) intronic sites flanking the TNNT2 alternative exon 5. Binds preferentially

to UG-rich sequences, in particular UG repeat and UGUU motifs. Binds to apoB mRNA, specifically to AU-rich sequences located immediately upstream of the edited cytidine. Binds AU-rich sequences in the 3'-UTR of COX2 mRNA (By similarity). Binds to an intronic RNA element responsible for the silencing of exon 21 splicing (By similarity). Binds to (CUG)n repeats (By similarity). May be a specific regulator of miRNA biogenesis. Binds to primary microRNA pri-MIR140 and, with CELF1, negatively regulates the processing to mature miRNA (PubMed:28431233).

Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q7T2T1, ECO:0000250|UniProtKB:Q9Z0H4} Note=Accumulates in the cytoplasm after ionizing radiation (By similarity). Colocalizes with APOBEC1 and A1CF. RNA-binding activity is detected in both nuclear and cytoplasmic compartments.

Tissue Location
Expressed in frontal cortex. Isoform 1 is expressed in brain and lung. Isoform 2 is expressed in heart, brain, placenta, lung, liver, kidney, skeletal muscle and pancreas. Isoform 4 is expressed in heart, lung, skeletal muscle, kidney and pancreas

CUGBP2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CUGBP2 Antibody (C-term) Blocking Peptide - Images

CUGBP2 Antibody (C-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. Alternative splicing results in multipletranscript variants encoding different isoforms. [provided byRefSeq].

CUGBP2 Antibody (C-term) Blocking Peptide - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Anney, R.J., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (8), 1369-1378 (2008) :