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Product datasheet for AP20451PU-M

CUG BP1 (CELF1) (+CUGBP2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	**Western blot**: 1/500-1/1000. **Immunohistochemistry on paraffin sections**: 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 62-115 of Human CUG-BP1/2.
Specificity:	This antibody detects endogenous levels of CUGBP1/2 protein. (region surrounding Lys95)
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 50, 54 kDa
Gene Name:	CUGBP, Elav-like family member 1
Database Link:	Entrez Gene 13046 MouseEntrez Gene 362160 RatEntrez Gene 10658 Human Q92879

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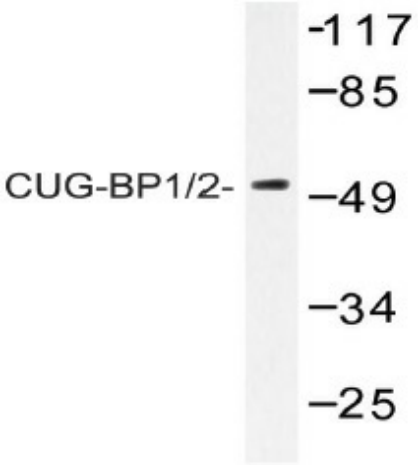
Background: Myotonic dystrophy (DM) is an autosomal dominant neuromuscular disease that is associated with a (CTG)n repeat expansion in the 3'-untranslated region of the myotonin protein kinase gene (DMPK). CUG-BP1 and CUG-BP2 are proteins that bind specifically to (CUG)8 oligonucleotides in vitro. While 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), hNab50. 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/EBPbeta transcription factor. CUG-BP1 is an important regulator of initiation from different AUG codons of C/EBPbeta 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.

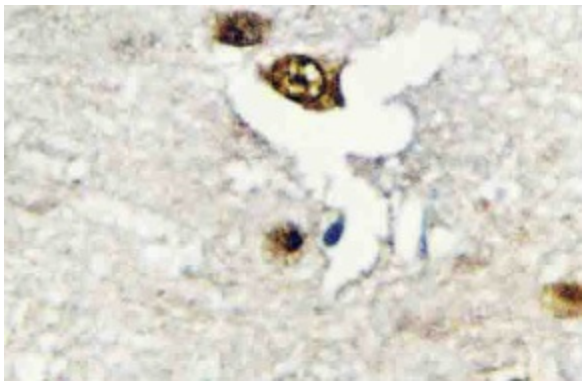
Synonyms: CELF-1, BRUNOL2, CELF1, CUGBP, NAB50, Bruno-like protein 2

Protein Families: Druggable Genome

Product images:



Western blot (WB) analysis of CUG-BP1/2 antibody in extracts from HeLa cells.



Immunohistochemistry (IHC) analyzes of CUG-BP1/2 antibody in paraffin-embedded human brain tissue.