

Product datasheet for TA301501

OriGene Technologies, Inc.

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CUG BP1 (CELF1) Mouse Monoclonal Antibody [Clone ID: 3B1]

Product data:

Product Type: Primary Antibodies

Clone Name: 3B1

Applications: FC, ICC/IF, IHC, IP, Simple Western, WB

Recommended Dilution: Immunohistochemistry: 1:100-1:500, Immunocytochemistry/ Immunofluorescence: 1:50-

1:200, Flow Cytometry: 1 ug per million cells, Immunohistochemistry-Frozen: 1:100-1:500, Western Blot: 1:500, Immunohistochemistry-Paraffin: 1:100-1:500, Simple Western: 1:200,

Immunoprecipitation, Gel Super Shift Assays

Reactivity: Human, Mouse, Rat, Bovine, Porcine, Rabbit

Host: Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

Immunogen: CUG-BP1 human nuclear RNA binding protein.

Formulation: Ascitic fluid and 0.1% sodium azide

Concentration: lot specific

Purification: Ascites

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: CUGBP, Elav-like family member 1

Database Link: NP 006551

Entrez Gene 13046 MouseEntrez Gene 362160 RatEntrez Gene 10658 Human

Q92879





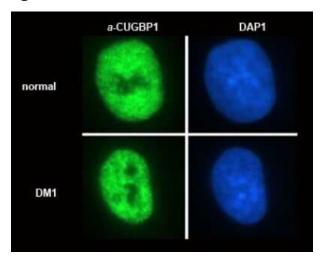
Background:

Myotonic dystrophy (MD) 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 (Mt-PK) gene. A (CUG) n oligonucleotides triplet repeat pre-mRNA/mRNA binding protein may play an important role in DM pathogenesis. HeLa cell protein, CUG-BP1, has been purified based upon its ability to bind specifically to (CUG) 8 oligonucleotides in vitro. CUG-BP1 is the major (CUG) 8 - binding activity in normal cells. CUG-BP1 has been identified as isoforms of a novel heterogeneous nuclear ribonucleoprotein (hnRNP), hNab50. The CUG-BP/hNab50 protein is localized predominantly in the nucleus and is associated with polyadenylated RNAs in vivo. In vitro RNA-binding/photocrosslinking studies demonstrate that CUG-BP/hNab50 binds to RNAs containing the Mt-PK 3' UTR. The (CUG) n repeat region in Mt-PK mRNA is a binding site for CUG-BP/hNab50 in vivo, and triplet repeat expansion leads to sequestration of this hnRNP on mutant Mt-PK transcripts.

Synonyms: BRUNOL2; CUG-BP; CUGBP1; EDEN-BP; hNab50; NAB50; NAPOR

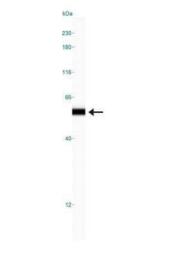
Protein Families: Druggable Genome

Product images:

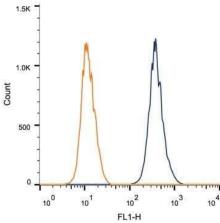


Immunocytochemistry/Immunofluorescence: CUGBP1 Antibody (3B1) TA301501 - Detection of the subcellular distribution of CUGBP1 (nuclear, non-nucleolar) in normal and DM1 (dystrophia myotonica) myoblasts.

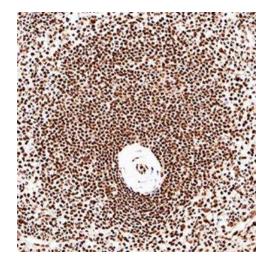




Simple Western: CUGBP1 Antibody (3B1) TA301501 - Simple Western lane view shows a specific band for CUGBP1 in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.

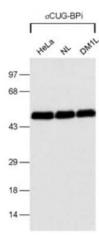


Flow Cytometry: CUGBP1 Antibody (3B1) TA301501 - Intracellular flow cytometric staining of 1 x 10^6 MCF-7 cells using CUGBP1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used



Immunohistochemistry-Paraffin: CUGBP1/CELF1 Antibody (3B1) TA301501 - IHC analysis of a formalin fixed paraffin-embedded (FFPE) human spleen using 1:100 conc. of CUGBP1/CELF1 antibody on a Bond Rx autostainer (Leica Biosystems). The assay involved 30 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (pH 9.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 15 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Nuclear staining was observed in lymphocytes.





Western Blot: CUGBP1 Antibody (3B1) TA301501 - Detection of CUG-BP1 in several cell lysates.