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CUGBP1 Monoclonal Antibody (3B1)

Catalog Number MA1-16675

Product data sheet

Details	
Size	100 µL
Host/Isotope	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	3B1
Immunogen	CUG-BP1 human nuclear RNA binding protein.
Conjugate	Unconjugated
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	tris glycine with 150mM NaCl
Contains	0.02% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles

Species Reactivity	
Species reactivity	Bovine, Human, Mouse, Non-human primate, Pig, Rabbit, Rat
Published species	Not Applicable

Tested Applications	Dilution *
Flow Cytometry (Flow)	1 µg per million cells
Gel Shift (GS)	Assay-Dependent
Immunohistochemistry (Frozen) (IHC (F))	1:100-1:500
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:500
Immunoprecipitation (IP)	Assay-Dependent
Western Blot (WB)	1:200-1:500
Immunocytochemistry (ICC/IF)	1:50-1:200

Published Applications	
Miscellaneous PubMed (Misc)	See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

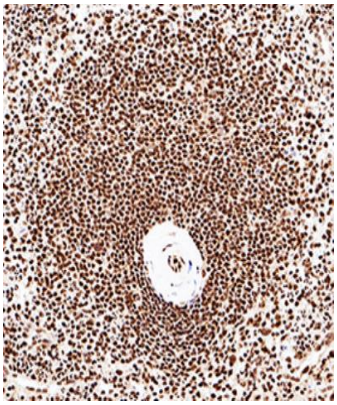
Suggested positive control: antigen standard for CUGBP1 (transient overexpression lysate).

Background/Target Information

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.

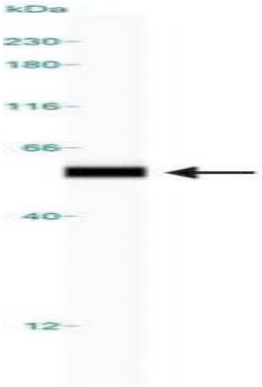
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Product Images For CUGBP1 Monoclonal Antibody (3B1)



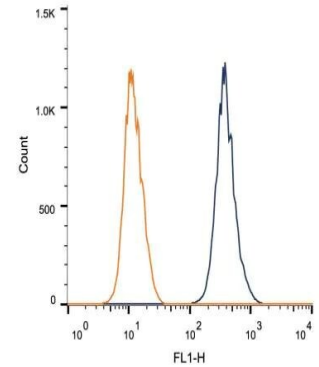
CUGBP1 Antibody (MA1-16675) in IHC (P)

Immunohistochemical analysis of CUGBP1 in formalin fixed paraffin-embedded (FFPE) human spleen. Samples were incubated in CUGBP1 monoclonal antibody (Product # MA1-16675) using a dilution of 1:100. 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.



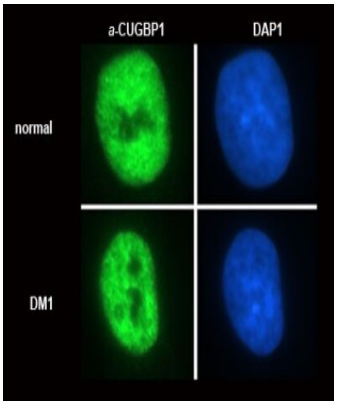
CUGBP1 Antibody (MA1-16675) in WB

Western blot analysis of CUGBP1 in 0.5 mg/mL HeLa lysate. Samples were incubated in CUGBP1 monoclonal antibody (Product # MA1-16675). This experiment was performed under reducing conditions using the 12-230 kDa separation system..



CUGBP1 Antibody (MA1-16675) in Flow

Flow cytometry of CUGBP1 in 1 x 10^6 MCF-7 cells. Samples were incubated in CUGBP1 monoclonal antibody (Product # MA1-16675) using a dilution of 1 µg/1x10^6 cells. Antibody (dark blue). Isotype control shown in orange.



CUGBP1 Antibody (MA1-16675) in ICC/IF

Immunocytochemistry analysis of CUGBP1 in normal and DM1 (dystrophia myotonica) myoblasts. Samples were incubated in CUGBP1 monoclonal antibody (Product # MA1-16675). Subcellular distribution of CUGBP1 (nuclear, non-nucleolar).

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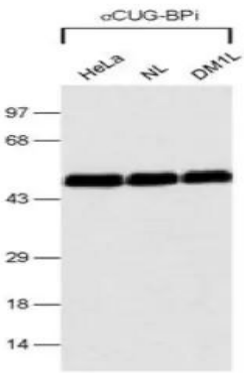

CUGBP1 Antibody (MA1-16675) in WB

Western blot analysis of CUGBP1 in several cell lysates. Sample was incubated in CUGBP1 monoclonal antibody (Product # MA1-16675).

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PubMed References For CUGBP1 Monoclonal Antibody (3B1)

1 Miscellaneous PubMed References

Species / Dilution	Summary
	MA1-16675 was used in immunohistochemistry and western blot to investigate the relationship between MTMR1 expression and CUG-BP1 levels in myotonic dystrophy 1 and 2 patients
Not Applicable / Not Cited	Experimental and molecular pathology (Oct 2010; 89: 158) **"Analysis of MTMR1 expression and correlation with muscle pathological features in juvenile/adult onset myotonic dystrophy type 1 (DM1) and in myotonic dystrophy type 2 (DM2)."** Author(s):Santoro M,Modoni A,Masciullo M,Gidaro T,Broccolini A,Ricci E,Tonali PA,Silvestri G PubMed Article URL:http://dx.doi.org/10.1016/j.yexmp.2010.05.007

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