

ARG10721 anti-MBNL1 antibody [1H1]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1H1] recognizes MBNL1
Tested Reactivity	Hu
Predict Reactivity	Chk
Species Does Not React With	Ms, Rat
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	1H1
Isotype	IgG1
Target Name	MBNL1
Species	Human
Immunogen	Full-length recombinant Human MBNL1.
Conjugation	Un-conjugated
Alternate Names	Muscleblind-like protein 1; Triplet-expansion RNA-binding protein; MBNL; EXP

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:1000
	IHC-Fr	1:1000
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

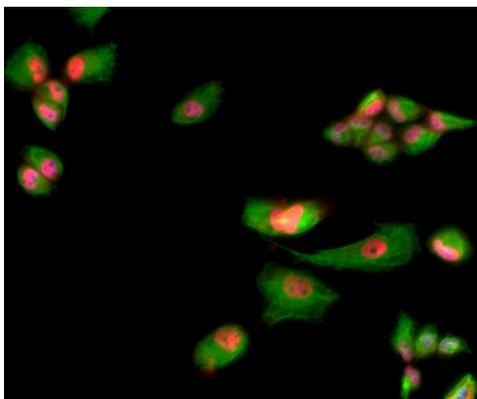
Form	Liquid
Purification	Affinity purification.
Buffer	PBS and 50% Glycerol.
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

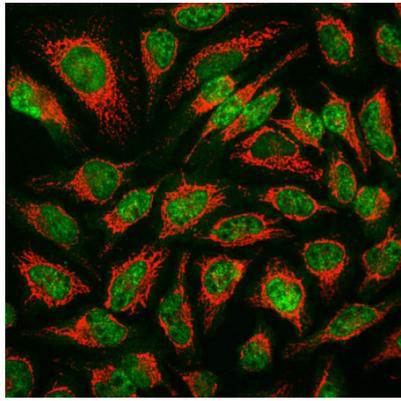
Database links	GeneID: 4154 Human Swiss-port # Q9NR56 Human
Gene Symbol	MBNL1
Gene Full Name	muscleblind-like splicing regulator 1
Background	This gene encodes a member of the muscleblind protein family which was initially described in <i>Drosophila melanogaster</i> . The encoded protein is a C3H-type zinc finger protein that modulates alternative splicing of pre-mRNAs. Muscleblind proteins bind specifically to expanded dsCUG RNA but not to normal size CUG repeats and may thereby play a role in the pathophysiology of myotonic dystrophy. Mice lacking this gene exhibited muscle abnormalities and cataracts. Several alternatively spliced transcript variants have been described but the full-length natures of only some have been determined. The different isoforms are thought to have different binding specificities and/or splicing activities. [provided by RefSeq, Sep 2015]
Function	Mediates pre-mRNA alternative splicing regulation. Acts either as activator or repressor of splicing on specific pre-mRNA targets. Inhibits cardiac troponin-T (TNNT2) pre-mRNA exon inclusion but induces insulin receptor (IR) pre-mRNA exon inclusion in muscle. Antagonizes the alternative splicing activity pattern of CELF proteins. Regulates the TNNT2 exon 5 skipping through competition with U2AF2. Inhibits the formation of the spliceosome A complex on intron 4 of TNNT2 pre-mRNA. Binds to the stem-loop structure within the polypyrimidine tract of TNNT2 intron 4 during spliceosome assembly. Binds to the 5'-YGCU(U/G)Y-3' consensus sequence. Binds to the IR RNA. Binds to expanded CUG repeat RNA, which folds into a hairpin structure containing GC base pairs and bulged, unpaired U residues. [UniProt]
Calculated Mw	42 kDa

Images



ARG10721 anti-MBNL1 antibody [1H1] ICC/IF image

Immunocytochemistry: HeLa cells were stained with ARG10721 anti-MBNL1 antibody [1H1] at 1: 1000. Muscleblind-like protein 1 is present in the nucleus of HeLa cells (red). Co-staining is with a rabbit polyclonal antibody against vimentin (red) reveals cytoplasmic intermediate filaments. Blue is a DNA stain which largely colocalizes with the MBNL1 protein in the nucleus.



ARG10721 anti-MBNL1 antibody [1H1] ICC/IF image

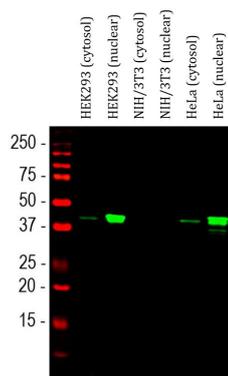
Immunofluorescence: HeLa cells stained with ARG10721 anti-MBNL1 antibody [1H1] (green) at 1:1000 dilution and costained with [ARG10757](#) anti-Hsp 60 antibody (red) at 1:5000 dilution.

The MBNL1 antibody specifically labels nuclei, while the Hsp 60 antibody reveals protein expressed in mitochondria.



ARG10721 anti-MBNL1 antibody [1H1] WB image

Western blot: HL60 cell lysate was stained with ARG10721 anti-MBNL1 antibody [1H1] at 1:1000 dilution.



ARG10721 anti-MBNL1 antibody [1H1] WB image

Western blot: HEK293 (cytosol), HEK293 (nuclear), NIH/3T3 (cytosol), NIH/3T3 (nuclear), HeLa (cytosol) and HeLa (nuclear). The blots were stained with ARG10721 anti-MBNL1 antibody [1H1] (green) at 1:1000 dilution.

MBNL1 protein is predominantly detected in the nuclear enriched fractions. This antibody binds to the Human protein and does not bind the rodent homologue.