

## 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.	

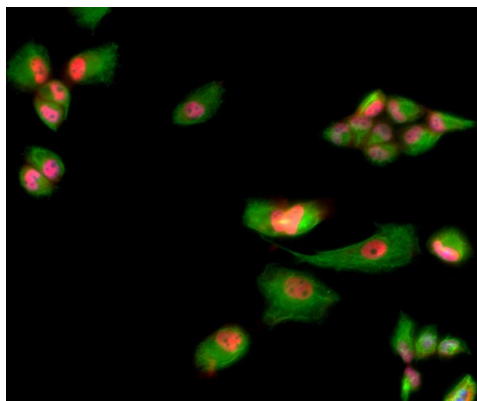
### Properties

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.

## Bioinformation

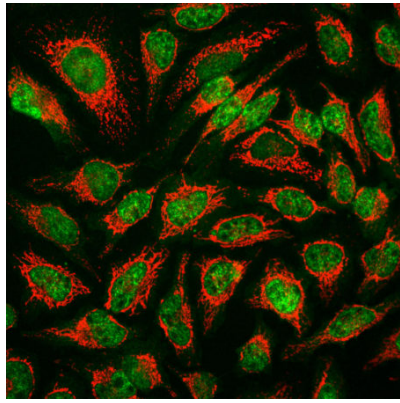
Database links	<a href="#">GeneID: 4154 Human</a> <a href="#">Swiss-port # Q9NR56 Human</a>
Gene Symbol	MBNL1
Gene Full Name	muscleblind-like splicing regulator 1
Background	This gene encodes a member of the muscleblind protein family which was initially described in <i>Drosophila melanogaster</i> . 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

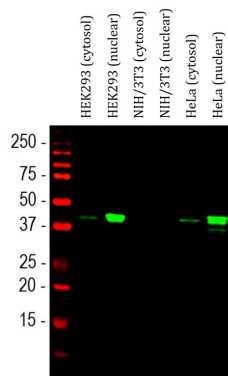
Immunofluorescence: HeLa cells stained with ARG10721 anti-MBNL1 antibody [1H1] (green) at 1:1000 dilution and costained with [ARG10757](#) anti-Hsp 60 antibody (red) at 1:5000 dilution.

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.