

**MBNL1 / MBNL Antibody (clone 3E7)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS13356****Specification**

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**MBNL1 / MBNL Antibody (clone 3E7) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">O9NR56</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	42kDa KDa

**MBNL1 / MBNL Antibody (clone 3E7) - Additional Information****Gene ID** 4154**Other Names**

Muscleblind-like protein 1, Triplet-expansion RNA-binding protein, MBNL1, EXP, KIAA0428, MBNL

**Reconstitution & Storage**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

**Precautions**

MBNL1 / MBNL Antibody (clone 3E7) is for research use only and not for use in diagnostic or therapeutic procedures.

**MBNL1 / MBNL Antibody (clone 3E7) - Protein Information****Name** MBNL1**Synonyms** EXP, KIAA0428, MBNL**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. Together with RNA binding proteins RBPMS and RBFOX2, activates vascular smooth muscle cells alternative splicing events (PubMed: [37548402](http://www.uniprot.org/citations/37548402)). Regulates NCOR2 alternative splicing (By similarity).

**Cellular Location**

Nucleus. Cytoplasm. Cytoplasmic granule. Note=Localized with DDX1, TIAL1 and YBX1 in stress granules upon stress (PubMed:18335541). Localized in the cytoplasm of multinucleated myotubes (PubMed:18335541). Colocalizes with nuclear foci of retained expanded-repeat transcripts in myotubes from patients affected by myotonic dystrophy (PubMed:10970838, PubMed:11590133, PubMed:11929853)

#### Tissue Location

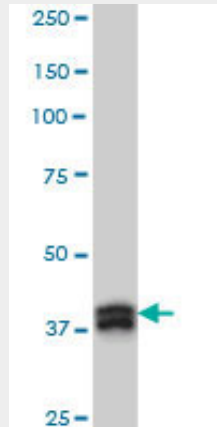
Highly expressed in cardiac, skeletal muscle and during myoblast differentiation. Weakly expressed in other tissues (at protein level). Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

#### MBNL1 / MBNL Antibody (clone 3E7) - Protocols

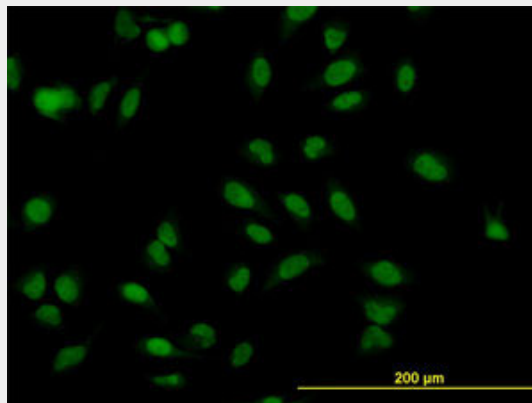
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

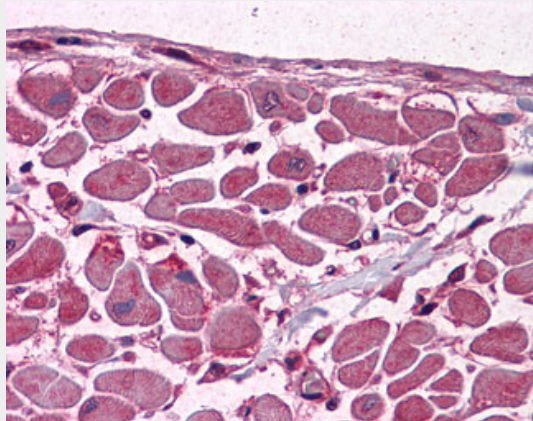
#### MBNL1 / MBNL Antibody (clone 3E7) - Images



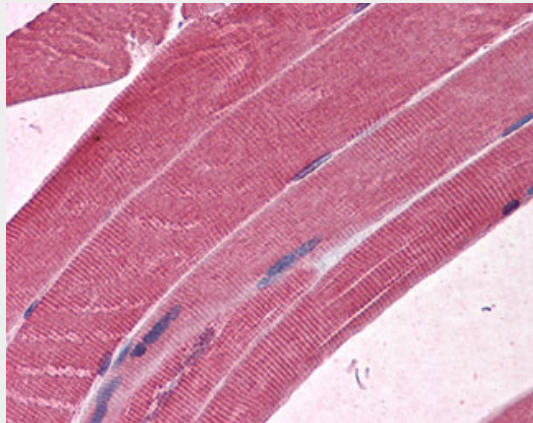
MBNL1 monoclonal antibody clone 3E7 Western blot of MBNL1 expression in HeLa NE.



Immunofluorescence of monoclonal antibody to MBNL1 on HeLa cell (antibody concentration 10 ug/ml).



Anti-MBNL1 antibody IHC of human heart.



Anti-MBNL1 antibody IHC of human skeletal muscle.

### **MBNL1 / MBNL Antibody (clone 3E7) - Background**

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### **MBNL1 / MBNL Antibody (clone 3E7) - References**

Borsani G.,et al.Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.  
Ishikawa K.,et al.DNA Res. 4:307-313(1997).  
Miller J.W.,et al.EMBO J. 19:4439-4448(2000).  
Mankodi A.,et al.Hum. Mol. Genet. 10:2165-2170(2001).  
Pascual M.,et al.Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.