

## **MBNL1 Antibody**

Rabbit mAb Catalog # AP92389

## **Specification**

## **MBNL1 Antibody - Product Information**

Application WB
Primary Accession Q9NR56
Clonality Monoclonal

**Other Names** 

EXP; EXP35; EXP40; EXP42; MBNL; MBNL1;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 41817 Da

## **MBNL1** Antibody - Additional Information

Dilution WB~~1:1000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

MBNL1

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

# **MBNL1 Antibody - 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:<a href="http://www.uniprot.org/citations/37548402" target="\_blank">37548402</a>). 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**

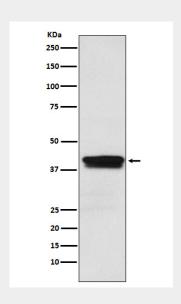
Highly expressed in cardiac, skeletal muscle and during myoblast differentiation. Weakly expressed in other tissues (at protein level). Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

#### **MBNL1 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **MBNL1 Antibody - Images**



Western blot analysis of MBNL1 expression in Jurkat cell lysate.