

Anti-MBNL1 Rabbit Monoclonal Antibody

Catalog # ABO15808

Specification

Anti-MBNL1 Rabbit Monoclonal Antibody - Product Information

Application **WB Primary Accession Q9NR56** Host Rabbit Isotype laG Reactivity Human, Mouse Clonality **Monoclonal** Format Liauid Description Anti-MBNL1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse.

Anti-MBNL1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4154

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

Calculated MW 43 kDa KDa

Application Details WB 1:500-1:2000

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human MBNL1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-MBNL1 Rabbit Monoclonal 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: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.

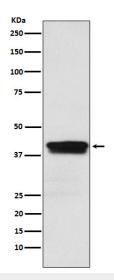
Anti-MBNL1 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-MBNL1 Rabbit Monoclonal Antibody - Images





Western blot analysis of MBNL1 expression in Jurkat cell lysate.