abcam

Product datasheet

Anti-MBNL1 antibody [1D11] ab77017

3 References 2 Images

Overview

Product name	Anti-MBNL1 antibody [1D11]
Description	Mouse monoclonal [1D11] to MBNL1
Host species	Mouse
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant full length protein corresponding to Human MBNL1. (AAH50535)
Positive control	HeLa whole cell lysate (**ab150035**); recombinant full length human MBNL1 (the immunogen).
General notes	This product was changed from ascites to tissue culture supernatant on 30th May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituent: PBS
Purity	Tissue culture supernatant
Purification notes	Purified from TCS.
Clonality	Monoclonal
Clone number	1D11
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab77017 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 41 kDa.

Target

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.

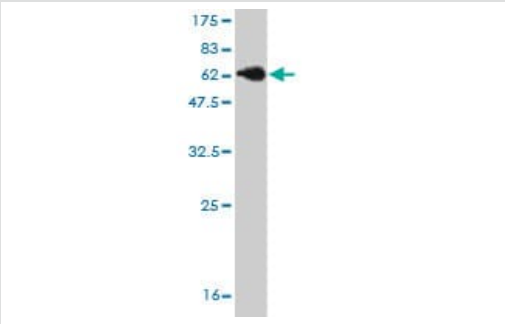
Tissue specificity Highly expressed in cardiac, skeletal muscle and during myoblast differentiation. Weakly expressed in other tissues (at protein level). Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Involvement in disease Plays a role in the pathogenesis of dystrophia myotonica type 1 (DM1) [MIM:160900]. A muscular disorder characterized by myotonia, muscle wasting in the distal extremities, cataract, hypogonadism, defective endocrine functions, male baldness and cardiac arrhythmias. Note=In muscle cells from DM1 patients, MBNL1 is sequestered by DMPK RNAs containing CUG triplet repeat expansions. MBNL1 binding is proportional to repeat length consistent with the direct correlation between the length of repeat expansion and disease severity.

Sequence similarities Belongs to the muscleblind family.
Contains 4 C3H1-type zinc fingers.

Cellular localization Nucleus. Cytoplasm. Cytoplasmic granule. Localized with DDX1, TIAL1 and YBX1 in stress granules upon stress. Localized in the cytoplasm of multinucleated myotubes. Colocalizes with nuclear foci of retained expanded-repeat transcripts in myotubes from patients affected by myotonic dystrophy.

Images



Western blot - Anti-MBNL1 antibody [1D11] (ab77017)

Anti-MBNL1 antibody [1D11] (ab77017) at 5 µg/ml + recombinant tagged full length human MBNL1 at 0.2 µg

Secondary

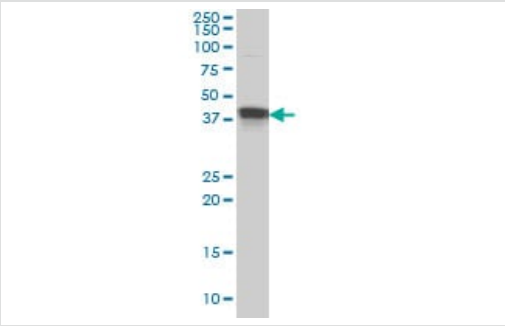
Goat anti-Mouse IgG (H&L)-HRP at 1/5000 dilution

Predicted band size: 41 kDa

Observed band size: 64 kDa

Molecular weight of the tag alone is 26 kDa.

This image was generated using the ascites version of the product.



Western blot - Anti-MBNL1 antibody [1D11] (ab77017)

Anti-MBNL1 antibody [1D11] (ab77017) at 1/500 dilution + HeLa cell lysate at 25 µg

Secondary

Goat anti-Mouse IgG (H&L)-HRP at 1/2500 dilution

Predicted band size: 41 kDa

Observed band size: 41 kDa

This image was generated using the ascites version of the product.

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