10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MBNL2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13023B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q5VZF2
Other Accession	NP_659002.1, NP_997187.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32800
Calculated MW	40518
Antigen Region	261-290

Additional Information

Gene ID	10150
Other Names	Muscleblind-like protein 2, Muscleblind-like protein 1, Muscleblind-like protein-like, Muscleblind-like protein-like 39, MBNL2, MBLL, MBLL39, MLP1
Target/Specificity	This MBNL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 261-290 amino acids from the C-terminal region of human MBNL2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MBNL2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MBNL2
Synonyms	MBLL, MBLL39, MLP1

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. RNA-binding protein that binds to 5'ACACCC-3' core sequence, termed zipcode, within the 3'UTR of ITGA3. Binds to CUG triplet repeat expansion in myotonic dystrophy muscle cells by sequestering the target RNAs. Together with RNA binding proteins RBPMS and RBFOX2, activates vascular smooth muscle cells alternative splicing events (By similarity). Regulates NCOR2 alternative splicing (By similarity). Seems to regulate expression and localization of ITGA3 by transporting it from the nucleus to cytoplasm at adhesion plaques. May play a role in myotonic dystrophy pathophysiology (DM).
Cellular Location	Nucleus. Cytoplasm. Note=Greater concentration in the nucleus. Expressed in or near large cytoplasmic adhesion plaques (PubMed:16273094). Location in the cytoplasm is microtubule-dependent (PubMed:16273094). In both DM1 and DM2 patients, colocalizes with nuclear foci of retained expanded-repeat transcripts (PubMed:11929853)
Tissue Location	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

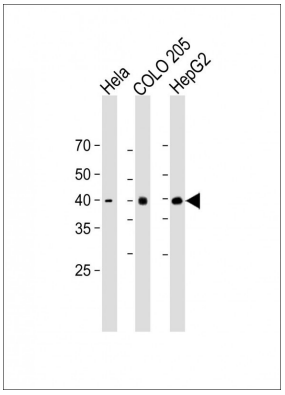
Background

This gene encodes a C3H-type zinc finger protein, which is similar to the Drosophila melanogaster muscleblind B protein. Drosophila muscleblind is a gene required for photoreceptor differentiation. Several alternatively spliced transcript variants have been described but the full-length natures of only some have been determined.

References

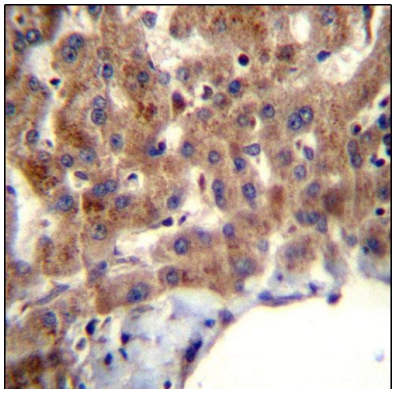
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
He, F., et al. Protein Sci. 18(1):80-91(2009)
Holt, I., et al. Am. J. Pathol. 174(1):216-227(2009)
Paul, S., et al. EMBO J. 25(18):4271-4283(2006)
Adereth, Y., et al. Nat. Cell Biol. 7(12):1240-1247(2005)

Images

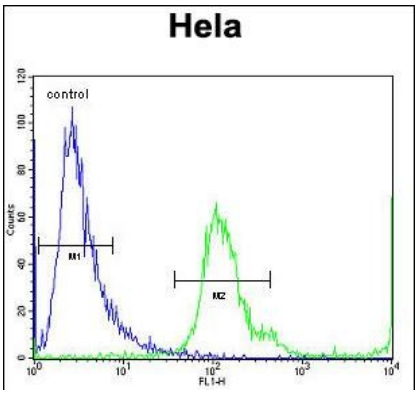


All lanes: Anti-MBNL2 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: COLO 205 whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 40 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

MBNL2 Antibody (C-term) (Cat. #AP13023b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed



by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MBNL2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



MBNL2 Antibody (C-term) (Cat. #AP13023b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.