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MBNL1 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP20042b

Specification

MBNL1 Blocking Peptide (C-term) - Product Information

Primary Accession	Q9NR56
Other Accession	NP_066368.2

MBNL1 Blocking Peptide (C-term) - Additional Information

Gene ID 4154

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

Target/Specificity
The synthetic peptide sequence is selected from aa 270-284 of HUMAN MBNL1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MBNL1 Blocking Peptide (C-term) - 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.

MBNL1 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

MBNL1 Blocking Peptide (C-term) - Images

MBNL1 Blocking Peptide (C-term) - Background

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MBNL1 Blocking Peptide (C-term) - References

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