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PTBP1 Blocking Peptide(N-term)

Synthetic peptide
Catalog # BP19710a

Specification

PTBP1 Blocking Peptide(N-term) - Product Information

Primary Accession	P26599
Other Accession	Q8WN55, NP_002810.1, NP_114367.1, NP_114368.1, NP_787041.1

PTBP1 Blocking Peptide(N-term) - Additional Information

Gene ID 5725

Other Names
Polypyrimidine tract-binding protein 1, PTB, 57 kDa RNA-binding protein PPTB-1, Heterogeneous nuclear ribonucleoprotein I, hnRNP I, PTBP1, PTB

Target/Specificity
The synthetic peptide sequence is selected from aa 41-55 of HUMAN PTBP1

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.

PTBP1 Blocking Peptide(N-term) - Protein Information

Name PTBP1

Synonyms PTB

Function
Plays a role in pre-mRNA splicing and in the regulation of alternative splicing events. Activates exon skipping of its own pre- mRNA during muscle cell differentiation. Binds to the polypyrimidine tract of introns. May promote RNA looping when bound to two separate polypyrimidine tracts in the same pre-mRNA. May promote the binding of U2 snRNP to pre-mRNA. Cooperates with RAVER1 to modulate switching between mutually exclusive exons during maturation of the TPM1 pre-mRNA. Represses the splicing of MAPT/Tau exon 10 (PubMed:15009664). Binds to polypyrimidine-rich controlling element (PCE) of CFTR and promotes exon skipping of CFTR exon 9, thereby antagonizing TIA1 and its role in exon inclusion of CFTR exon 9 (PubMed:14966131). Plays a role

in the splicing of pyruvate kinase PKM by binding repressively to a polypyrimidine tract flanking PKM exon 9, inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (PubMed:20010808). In case of infection by picornaviruses, binds to the viral internal ribosome entry site (IRES) and stimulates the IRES- mediated translation (PubMed:21518806).

Cellular Location
Nucleus.

PTBP1 Blocking Peptide(N-term) - Protocols

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

- Blocking Peptides

PTBP1 Blocking Peptide(N-term) - Images

PTBP1 Blocking Peptide(N-term) - Background

This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA-binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. The protein encoded by this gene has four repeats of quasi-RNA recognition motif (RRM) domains that bind RNAs. This protein binds to the intronic polypyrimidine tracts that requires pre-mRNA splicing and acts via the protein degradation ubiquitin-proteasome pathway. It may also promote the binding of U2 snRNP to pre-mRNAs. This protein is localized in the nucleoplasm and it is also detected in the perinucleolar structure. Alternatively spliced transcript variants encoding different isoforms have been described.

PTBP1 Blocking Peptide(N-term) - References

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