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HNRNPD Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP16090a

Specification

HNRNPD Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q14103

HNRNPD Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3184

Other Names
Heterogeneous nuclear ribonucleoprotein D0, hnRNP D0, AU-rich element RNA-binding protein 1, HNRNPD, AUF1, HNRPD

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.

HNRNPD Antibody (N-term) Blocking Peptide - Protein Information

Name HNRNPD

Synonyms AUF1, HNRPD

Function
Binds with high affinity to RNA molecules that contain AU- rich elements (AREs) found within the 3'-UTR of many proto-oncogenes and cytokine mRNAs. Also binds to double- and single-stranded DNA sequences in a specific manner and functions a transcription factor. Each of the RNA-binding domains specifically can bind solely to a single-stranded non-monotonous 5'-UUAG-3' sequence and also weaker to the single-stranded 5'-TTAGGG-3' telomeric DNA repeat. Binds RNA oligonucleotides with 5'-UUAGGG-3' repeats more tightly than the telomeric single-stranded DNA 5'-TTAGGG-3' repeats. Binding of RRM1 to DNA inhibits the formation of DNA quadruplex structure which may play a role in telomere elongation. May be involved in translationally coupled mRNA turnover. Implicated with other RNA-binding proteins in the cytoplasmic deadenylation/translational and decay interplay of the FOS mRNA mediated by the major coding-region determinant of instability (mCRD) domain. May play a role in the regulation of the rhythmic expression of circadian clock core genes. Directly binds to the 3'UTR of CRY1 mRNA and induces CRY1 rhythmic translation. May also be involved in the regulation of PER2 translation.

Cellular Location

Nucleus. Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Component of ribonucleosomes. Cytoplasmic localization oscillates diurnally

HNRNPD Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

HNRNPD Antibody (N-term) Blocking Peptide - Images

HNRNPD Antibody (N-term) Blocking Peptide - Background

This gene belongs to the subfamily of ubiquitouslyexpressed heterogeneous nuclear ribonucleoproteins (hnRNPs). ThehnRNPs are nucleic acid binding proteins and they complex withheterogeneous nuclear RNA (hnRNA). These proteins are associatedwith pre-mRNAs in the nucleus and appear to influence pre-mRNAprocessing and other aspects of mRNA metabolism and transport.While all of the hnRNPs are present in the nucleus, some seem toshuttle between the nucleus and the cytoplasm. The hnRNP proteinshave distinct nucleic acid binding properties. The protein encodedby this gene has two repeats of quasi-RRM domains that bind toRNAs. It localizes to both the nucleus and the cytoplasm. Thisprotein is implicated in the regulation of mRNA stability.Alternative splicing of this gene results in four transcriptvariants.

HNRNPD Antibody (N-term) Blocking Peptide - References

Ishimaru, D., et al. J. Biol. Chem. 285(35):27182-27191(2010)Zhai, B., et al. J. Biol. Chem. 285(31):23568-23580(2010)Vazquez-Chantada, M., et al. Gastroenterology 138(5):1943-1953(2010)Trojanowicz, B., et al. Endocr. Relat. Cancer 16(3):857-871(2009)Pautz, A., et al. J. Biol. Chem. 284(5):2755-2766(2009)