

Product datasheet

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ARG42847 anti-hnRNP D / AUF1 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes hnRNP D / AUF1

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, IP, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name hnRNP D / AUF1

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-306 of Human hnRNP D / AUF1 (NP_002129.2).

Conjugation Un-conjugated

Alternate Names HNRPD; hnRNP D0; AU-rich element RNA-binding protein 1; AUF1A; hnRNPD0; Heterogeneous nuclear

ribonucleoprotein D0; AUF1; P37

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HepG2	
Observed Size	39, 47 kDa	

Properties

Form	Liquid	
Purification	Affinity purified.	
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol	
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw	

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

HNRNPD

Gene Full Name

heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa)

Background

This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are nucleic acid 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 two repeats of quasi-RRM domains that bind to RNAs. It localizes to both the nucleus and the cytoplasm. This protein is implicated in the regulation of mRNA stability. Alternative splicing of this gene results in four transcript variants. [provided by RefSeq, Jul 2008]

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. [UniProt]

Calculated Mw

38 kDa

PTM

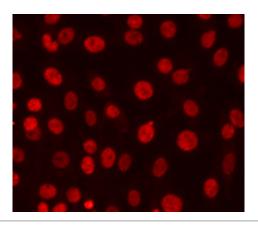
Arg-345 is dimethylated, probably to asymmetric dimethylarginine.

Methylated by PRMT1, in an insulin-dependent manner. The PRMT1-mediated methylation regulates tyrosine phosphorylation (By similarity). [UniProt]

Cellular Localization

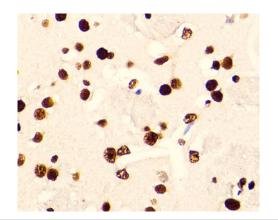
Nucleus. Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Component of ribonucleosomes. Cytoplasmic localization oscillates diurnally. [UniProt]

Images



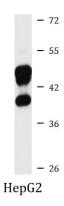
ARG42847 anti-hnRNP D / AUF1 antibody ICC/IF image

Immunofluorescence: C6 cells stained with ARG42847 anti-hnRNP D / AUF1 antibody at 1:100 dilution.



ARG42847 anti-hnRNP D / AUF1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain tissue stained with ARG42847 anti-hnRNP D / AUF1 antibody at 1:100 dilution.



ARG42847 anti-hnRNP D / AUF1 antibody WB image

Western blot: 25 μg of HepG2 cell lysate stained with ARG42847 anti-hnRNP D / AUF1 antibody at 1:1000 dilution.