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HNRNPD / AUF1 Antibody (aa49-98)

Rabbit Polyclonal Antibody
Catalog # ALS15261

Specification

HNRNPD / AUF1 Antibody (aa49-98) - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q14103
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**38kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200** **E~~N/A**

HNRNPD / AUF1 Antibody (aa49-98) - Additional Information

Gene ID 3184

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

Target/Specificity
hnRPD Antibody detects endogenous levels of total hnRPD protein.

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
HNRNPD / AUF1 Antibody (aa49-98) is for research use only and not for use in diagnostic or therapeutic procedures.

HNRNPD / AUF1 Antibody (aa49-98) - 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.

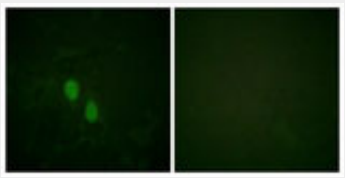
Cellular Location
Nucleus. Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Component of ribonucleosomes. Cytoplasmic localization oscillates diurnally

HNRNPD / AUF1 Antibody (aa49-98) - Protocols

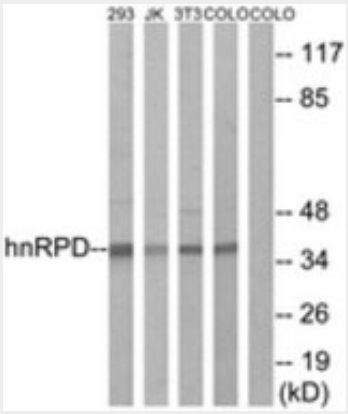
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HNRNPD / AUF1 Antibody (aa49-98) - Images



Immunofluorescence of HeLa cells, using hnRPD (Ab-83) Antibody.



Western blot of extracts from 293/Jurkat/3T3/COLO205 cells, using hnRPD (Ab-83) Antibody.

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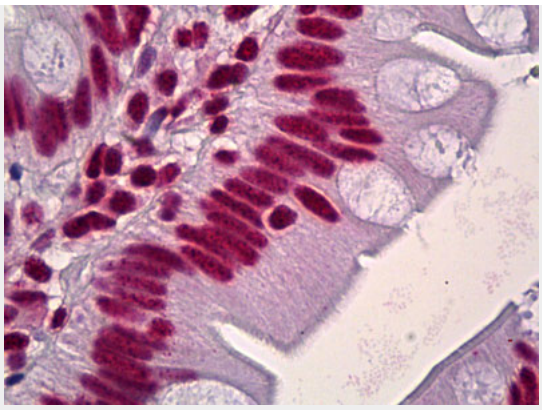
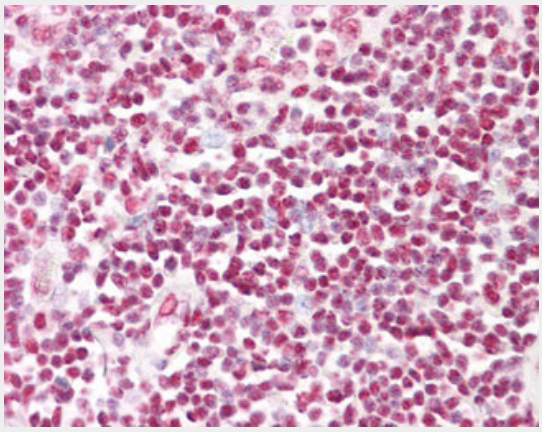


Anti-HNRNPD / AUF1 antibody IHC of human small intestine.



Anti-HNRNPD / AUF1 antibody IHC of human tonsil.

HNRNPD / AUF1 Antibody (aa49-98) - Background

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.

HNRNPD / AUF1 Antibody (aa49-98) - References

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Dempsey L.A.,et al.Genomics 49:378-384(1998).
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Hillier L.W.,et al.Nature 434:724-731(2005).
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