

HNRNPA2B1 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF4097a

Specification

HNRNPA2B1 Antibody (internal region) - Product Information

Application WB, IHC Primary Accession P22626

Other Accession NP 002128.1, NP 112533.1, 3181, 53379

Reactivity Human, Mouse Predicted Rat, Pig, Dog, Cow

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 37430

HNRNPA2B1 Antibody (internal region) - Additional Information

Gene ID 3181

Other Names

Heterogeneous nuclear ribonucleoproteins A2/B1, hnRNP A2/B1, HNRNPA2B1, HNRPA2B1

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HNRNPA2B1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

HNRNPA2B1 Antibody (internal region) - Protein Information

Name HNRNPA2B1

Synonyms HNRPA2B1

Function

Heterogeneous nuclear ribonucleoprotein (hnRNP) that associates with nascent pre-mRNAs, packaging them into hnRNP particles. The hnRNP particle arrangement on nascent hnRNA is non-random and sequence-dependent and serves to condense and stabilize the transcripts and minimize tangling and knotting. Packaging plays a role in various processes such as transcription,



pre-mRNA processing, RNA nuclear export, subcellular location, mRNA translation and stability of mature mRNAs (PubMed: 19099192). Forms hnRNP particles with at least 20 other different hnRNP and heterogeneous nuclear RNA in the nucleus. Involved in transport of specific mRNAs to the cytoplasm in oligodendrocytes and neurons: acts by specifically recognizing and binding the A2RE (21 nucleotide hnRNP A2 response element) or the A2RE11 (derivative 11 nucleotide oligonucleotide) sequence motifs present on some mRNAs, and promotes their transport to the cytoplasm (PubMed:10567417). Specifically binds single-stranded telomeric DNA sequences, protecting telomeric DNA repeat against endonuclease digestion (By similarity). Also binds other RNA molecules, such as primary miRNA (pri-miRNAs): acts as a nuclear 'reader' of the N6-methyladenosine (m6A) mark by specifically recognizing and binding a subset of nuclear m6A-containing pri-miRNAs. Binding to m6A-containing pri-miRNAs promotes pri-miRNA processing by enhancing binding of DGCR8 to pri-miRNA transcripts (PubMed:26321680). Involved in miRNA sorting into exosomes following sumoylation, possibly by binding (m6A)-containing pre-miRNAs (PubMed:24356509). Acts as a regulator of efficiency of mRNA splicing, possibly by

href="http://www.uniprot.org/citations/26321680" target="_blank">26321680). Plays a role in the splicing of pyruvate kinase PKM by binding repressively to sequences flanking PKM exon 9, inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (PubMed:20010808). Also plays a role in the activation of the innate immune response (PubMed:31320558). Mechanistically, senses the presence of viral DNA in the nucleus, homodimerizes and is demethylated by JMJD6 (PubMed:31320558" target="_blank">31320558). In turn, translocates to the cytoplasm where it activates the TBK1-IRF3 pathway, leading to interferon alpha/beta production (PubMed:31320558).

Cellular Location

Nucleus. Nucleus, nucleoplasm. Cytoplasm. Cytoplasmic granule. Secreted, extracellular exosome. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs (PubMed:17289661). Component of ribonucleosomes (PubMed:17289661). Not found in the nucleolus (PubMed:17289661). Found in exosomes following sumoylation (PubMed:24356509).

HNRNPA2B1 Antibody (internal region) - Protocols

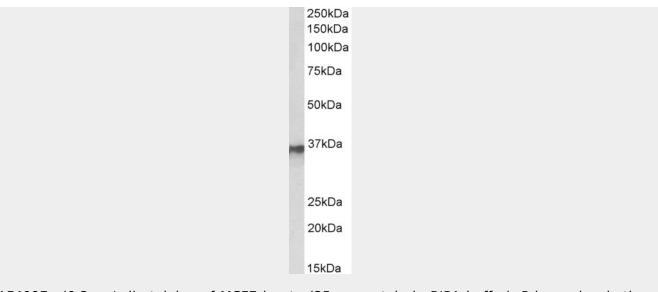
binding to m6A-containing pre-mRNAs (PubMed:<a

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HNRNPA2B1 Antibody (internal region) - Images

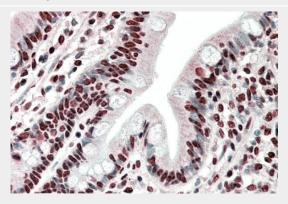




AF4097a (0.3 μ g/ml) staining of MCF7 lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa

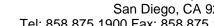
AF4097a (0.01 μ g/ml) staining of NIH3T3 nuclear lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF4097a (5 μ g/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

HNRNPA2B1 Antibody (internal region) - Background







This antibody is expected to recognize both reported isoforms (NP 002128.1; NP 112533.1).

HNRNPA2B1 Antibody (internal region) - References

Interaction of hnRNPA1/A2 and DAZAP1 with an Alu-derived intronic splicing enhancer regulates ATM aberrant splicing. Pastor T, Pagani F. PloS one 2011 6 (8): e23349. PMID: 21858080