

Anti-HnRNP A1 Picoband Antibody

Catalog # ABO10189

Specification

Anti-HnRNP A1 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP09651HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Heterogeneous nuclear ribonucleoprotein A1(HNRNPA1)detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HnRNP A1 Picoband Antibody - Additional Information

Gene ID 3178

Other Names Heterogeneous nuclear ribonucleoprotein A1, hnRNP A1, Helix-destabilizing protein, Single-strand RNA-binding protein, hnRNP core protein A1, Heterogeneous nuclear ribonucleoprotein A1, N-terminally processed, HNRNPA1, HNRPA1

Calculated MW 38747 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

 Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles continuously between the nucleus and the cytoplasm along with mRNA. Component of ribonucleosomes. In the course of viral infection, colocalizes with HCV NS5B at speckles in the cytoplasm in a HCV-replication dependent manner.

Protein Name Heterogeneous nuclear ribonucleoprotein A1

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human HnRNP A1 (8-42aa KEPEQLRKLFIGGLSFETTDESLRSHFEQWGTLTD), identical to the related mouse and rat sequences.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-HnRNP A1 Picoband Antibody - Protein Information

Name HNRNPA1

Synonyms HNRPA1

Function

Involved in the packaging of pre-mRNA into hnRNP particles, transport of poly(A) mRNA from the nucleus to the cytoplasm and modulation of splice site selection (PubMed:17371836). 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). Binds to the IRES and thereby inhibits the translation of the apoptosis protease activating factor APAF1 (PubMed:31498791). May bind to specific miRNA hairpins (PubMed:28431233).

Cellular Location

Nucleus. Cytoplasm Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles continuously between the nucleus and the cytoplasm along with mRNA. Component of ribonucleosomes (PubMed:17289661) Nucleus. Note=(Microbial infection) SARS coronavirus-2/SARS-CoV-2 ORF6 protein increases accumulation to the nucleus.

Anti-HnRNP A1 Picoband Antibody - Protocols

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

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

Anti-HnRNP A1 Picoband Antibody - Images





Western blot analysis of HnRNP A1 expression in rat liver extract (lane 1), mouse thymus extract (lane 2) and HELA whole cell lysates (lane 3). HnRNP A1 at 39KD was detected using rabbit anti-HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 0.5 $\hat{1}_{4}$ g/mL. The blot was developed using chemiluminescence (ECL) method .



HnRNP A1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 1 \hat{I}_{4} g/mL. The immunohistochemical section was developed using SABC method .



HnRNP A1 was detected in paraffin-embedded sections of mouse kidney tissues using rabbit anti-HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 1 \hat{l}_4 g/mL. The immunohistochemical section was developed using SABC method .



HnRNP A1 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti-HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 1 \hat{l}_4 g/mL. The immunohistochemical section was developed using SABC method .



HnRNP A1 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 1 \hat{l}_4 g/mL. The immunohistochemical section was developed using SABC method .



HnRNP A1 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- HnRNP A1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10189) at 1 \hat{I}_{4}^{1} g/mL. The immunohistochemical section was developed using SABC method .

Anti-HnRNP A1 Picoband Antibody - Background

Heterogeneous nuclear ribonucleoprotein A1 is a protein that in humans is encoded by the HNRNPA1 gene. This gene encodes a member of a family of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs), which are RNA-binding proteins that associate with pre-mRNAs in the nucleus and influence pre-mRNA processing, as well as other aspects of mRNA



metabolism and transport. The protein encoded by this gene is one of the most abundant core proteins of hnRNP complexes and plays a key role in the regulation of alternative splicing. Mutations in this gene have been observed in individuals with amyotrophic lateral sclerosis 20. Multiple alternatively spliced transcript variants have been found. There are numerous pseudogenes of this gene distributed throughout the genome.