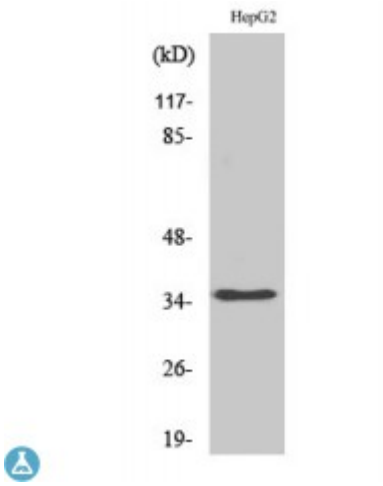
Anti-hnRNP A2/B1 antibody



Description	Rabbit polyclonal to hnRNP A2/B1.

Model	STJ93558
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human hnRNP A2/B1
Immunogen Region	1-80 aa, N-terminal
Gene ID	3181
Gene Symbol	HNRNPA2B1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	hnRNP A2/B1 Polyclonal Antibody detects endogenous levels of hnRNP A2/B1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Heterogeneous nuclear ribonucleoproteins A2/B1 hnRNP A2/B1
Molecular Weight	36 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5033OMIM:600124
Alternative Names	Heterogeneous nuclear ribonucleoproteins A2/B1 hnRNP A2/B1
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 . 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 . Specifically binds single-stranded telomeric DNA sequences, protecting telomeric DNA repeat against endonuclease digestion . 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 . Involved in miRNA sorting into exosomes following sumoylation, possibly by binding (m6A)-containing pre-miRNAs . Acts as a regulator of efficiency of mRNA splicing, possibly by binding to m6A-containing pre-mRNAs . (Microbial infection) Involved in the transport of HIV-1 genomic RNA out of the nucleus, to the microtubule organizing center (MTOC), and then from the MTOC to the cytoplasm: acts by specifically recognizing and binding the A2RE (21 nucleotide hnRNP A2 response element) sequence motifs present on HIV-1 genomic RNA, and promotes its transport.
Sequence and Domain Family	The low complexity (LC) region is intrinsically disordered. When incubated at high concentration, it is able to polymerize into labile, amyloid-like fibers and form cross-beta polymerization structures, probably driving the formation of hydrogels. In contrast to irreversible, pathogenic amyloids, the fibers polymerized from LC regions disassemble upon dilution. A number of evidences suggest that formation of cross-beta structures by LC regions mediate the formation of RNA granules, liquid-like droplets, and hydrogels.
Cellular Localization	Nucleus, nucleoplasm Cytoplasmic granule Secreted, exosome. Localized in cytoplasmic mRNP granules containing untranslated mRNAs . Component of ribonucleosomes . Not found in the nucleolus . Found in exosomes follwong sumoylation . Isoform A2: Nucleus Cytoplasm. Predominantly nucleoplasmic, however is also found in the cytoplasm of cells in some tissues .
Post-translational Modifications	Sumoylated in exosomes, promoting miRNAs-binding. Asymmetric dimethylation at Arg-266 constitutes the major methylation site . According to

a report, methylation affects subcellular location and promotes nuclear localization . According to another report, methylation at Arg-266 does not influence nucleocytoplasmic shuttling .