



Recombinant Human Heterogeneous nuclear ribonucleoproteins A2/B1 (HNRNPA2B1)

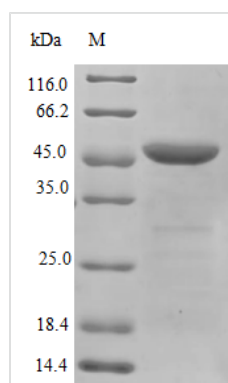
Product Code	CSB-EP010602HU
Relevance	<p>Heterogeneous nuclear ribonucleoprotein (hnRNP) that associates with nascent pre-mRNAs, packaging them into hnRNP particles. The hnRNP particle arrangement on nascent hnRNA is non-random and sequence-dependent and serves to condense and stabilize the transcripts 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.</p>
Storage	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.</p>
Uniprot No.	I6L957
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	<p>MEREKEQFRKLFIGGLSFETTEESLRNYYEQWGKLTDCVVMRDPASKRSRGF GFVTFSSMAEVDAAAMAARPHSIDGRVVEPKRAVAREESGKPGAHVTVKKLFV GGIKEDTEEHHLRDYFEEYGKIDTIEITDRQSGKKRGFGFVTFDDHDPVDKIVL QKYHTINGHNAEVRKALSRQEMQEDLEVAILEVAPVMEEEEEDMVVEDLDMA</p>



TRVGATEVVMTTMEEEEIMEVEITMILEIITSNLLTTVQ

Lead Time	3-7 business days
Source	E.coli
Gene Names	HNRNPA2B1
Expression Region	1-249aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-B2M-tagged
Mol. Weight	42.4kDa
Protein Description	Full Length of BC000506

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Cloning the gene encoding the Human HNRNPA2B1 protein (1-249aa) into a plasmid vector leads to the formation of recombinant plasmid. The resulting recombination plasmid is transformed into e.coli cells. e.coli cells containing the recombinant plasmid survive in the presence of a specific antibiotic and are selected to be cultured under conditions conducive to the expression of the gene of interest. A N-terminal 6xHis-B2M tag is linked to the protein. Following expression, the recombinant Human HNRNPA2B1 protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is utilized to resolve the resulting recombinant Human HNRNPA2B1 protein, demonstrating a purity exceeding 90%.