

Recombinant hnRNP A2B1 protein

Catalog No: 31607

Lot No: 35416001

Expressed In: Baculovirus

Quantity: 10, 1000 µg

Concentration: 0.1 µg/µl

Source: Human

Buffer Contents: Recombinant hnRNP A2B1-B1 protein is supplied at a concentration of 0.1 µg/µl in 25 mM HEPES pH 7.5, 500 mM NaCl, 5% glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

Background: hnRNP A2B1 (Heterogeneous Nuclear Ribonucleoprotein A2/B1, also known as RNPA2; HNRPA2; HNRPB1; SNRPB1; HNRNPA2; HNRNPB1; IBMPFD2; HNRPA2B1) belongs to the A/B subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. hnRNP A2B1 includes two different isoforms A2 and B1. It is reported that hnRNP A2B1 is a nuclear “reader” of the m6A mark, acting as an adaptor that recruits the Microprocessor complex to a subset of precursor miRNAs, facilitating their processing into mature miRNAs.

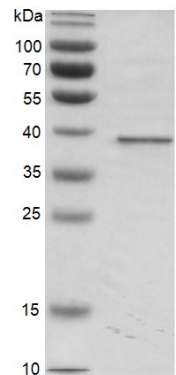
Protein Details: Recombinant hnRNP A2B1-B1 protein is the B1 isoform of hnRNP A2B1 and was expressed in a Baculovirus expression system as the full length protein (accession number NP_112533.1) with an N-terminal FLAG-Tag. The molecular weight of hnRNP A2B1-B1 is 38.4 kDa.

Application Notes: Recombinant hnRNP A2B1-B1 protein is suitable for use in evaluation of protein-protein interactions and RNA binding assays.

Activity Assay Details: 75 pmol biotinylated m6A ssDNA oligos (5'-GTTGCCTGTTTCGTGTTGG/m6A/CTTGCCTGT-3') were incubated with hnRNP A2B1 protein in binding buffer including 25 mM Tris-HCl pH 7.4, 150 mM NaCl, 5% glycerol, 0.1% Triton X-100 for 3 hr at 4°C. The DNA-hnRNP A2B1 compounds were incubated with streptavidin beads for 1 hr at 4°C and pull-down complexes were run on SDS-PAGE gel, stained with Coomassie Blue. Biotinylated, unmethylated ssDNA oligos used as a negative control.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

hnRNP A2B1-B1

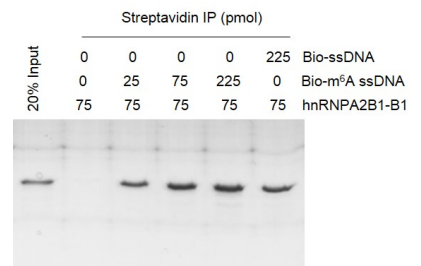


Recombinant hnRNP A2B1-B1 protein, SDS-PAGE gel.

Recombinant hnRNP A2B1-B1 was run on an 8% SDS-PAGE gel and stained with Coomassie Blue.

MW: 38.4 kDa

Purity: > 90%



Recombinant hnRNP A2B1-B1 activity.

Biotinylated m6A ssDNA oligos were incubated with hnRNP A2B1. DNA-hnRNP A2B1 compounds were pulled-down with streptavidin beads and run on SDS-PAGE gel, stained with Coomassie Blue. Results show that hnRNP A2B1 slightly preferentially binds to ssDNA with m6A modification compared with unmodified ssDNA.