

## **Anti-hnRNP A2B1 Antibody, clone 12B12.2 clone 12B12.2, from mouse**

Art. ID	SAF-MABF1098
Unit	EA
Deliverydetails	No Dangerous Good

### Description

Heterogeneous nuclear ribonucleoproteins A2/B1 (UniProt: P22626, also known as hnRNP A2/B1) is encoded by the HNRNPA2B1 gene (Gene ID: 3181) in human. The hnRNPs are RNA binding proteins that complex with heterogeneous nuclear RNA (hnRNA) and associate with pre-mRNAs in the nucleus. These complexes are associated with pre-mRNA processing and other aspects of mRNA metabolism and transport. It contains 2 RNA recognition motifs. Through alternate splicing two isoforms are generated. Isoform 1 (B1) is localized in cytoplasmic mRNP granules containing untranslated mRNA and in exosomes. It is not found in the nucleolus. Isoform 2 (A2) is predominantly nucleoplasmic, however it is also found in the cytoplasm of cells in some tissues. 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. The hnRNP proteins are involved in transport of specific mRNAs to the cytoplasm in oligodendrocytes and neurons and they act 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. They are also reported to specifically bind single-stranded telomeric DNA sequences, thereby protecting telomeric DNA repeat against endonuclease digestion.