Recombinant ROA2 protein (His tag)

Catalog Number	546848
Synonyms	hnRNP A2/B1
Species	Human
Expression System	E. coli
Accession	P22626
Molecular Weight	Predictes a molecular mass of 24.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	1-197
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-197 aa (P22626) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human HNRNPA2B1 Fragment (aa 1-197) is a high-purity protein encompassing the complete RRM1 and RRM2 domains of heterogeneous nuclear ribonucleoproteins A2/B1. This fragment serves as an essential tool for investigating RNA binding, pre-mRNA processing, and innate immune signaling mechanisms in a domain-specific context. Heterogeneous nuclear ribonucleoproteins A2/B1 (hnRNP A2/B1), encoded by the HNRNPA2B1 gene, is a multifunctional RNA-binding protein involved in packaging nascent pre-mRNAs into hnRNP particles, which stabilizes transcripts and facilitates processes including transcription, splicing, nuclear export, and mRNA translation. It specifically recognizes A2RE motifs to mediate mRNA transport in oligodendrocytes and neurons, binds telomeric DNA, and functions as a nuclear 'reader' of N6-methyladenosine (m6A) marks on primary miRNAs, enhancing their processing. Additionally, hnRNP A2/B1 regulates alternative splicing (e.g., of PKM), participates in miRNA sorting into exosomes upon sumoylation, and activates the innate immune response by sensing viral DNA, homodimerizing, and triggering the TBK1-IRF3 pathway for interferon production. It localizes to the nucleus, nucleoplasm, cytoplasm, cytoplasmic granules, and exosomes, reflecting its diverse roles in cellular and extracellular contexts.