Recombinant PRPF3 protein (His tag)

Catalog Number	537219
Synonyms	Pre-mRNA-splicing factor 3; hPrp3; U4/U6 snRNP 90 kDa protein
Species	Human
Expression System	E. coli
Accession	O43395
Molecular Weight	Predictes a molecular mass of 51.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	255-683
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 255-683 aa (O43395) 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 U4/U6 small nuclear ribonucleoprotein Prp3 fragment (residues 255-683) from Homo sapiens, offering a stable and soluble unit for investigating pre-mRNA splicing mechanisms. This 429-amino acid fragment is ideal for structural and biochemical studies, enabling researchers to explore spliceosome assembly and function with high reliability. The full-length U4/U6 small nuclear ribonucleoprotein Prp3, encoded by the PRPF3 gene, is a critical component in pre-mRNA splicing. It functions as part of the U4/U6-U5 tri-snRNP complex, facilitating spliceosome assembly and contributing to the precatalytic spliceosome (spliceosome B complex). This protein is localized to the nucleus, particularly within nuclear speckles, underscoring its essential role in RNA processing and gene expression regulation. The provided fragment represents a computationally optimized region designed to maintain stability and solubility, supporting detailed mechanistic studies without the complexities of the full-length protein.