Recombinant PRP8 protein (His tag)

Catalog Number	542916
Synonyms	220 kDa U5 snRNP-specific protein; PRP8 homolog; Splicing factor Prp8; p220
Species	Human
Expression System	E. coli
Accession	Q6P2Q9
Molecular Weight	Predictes a molecular mass of 31.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	2073-2335
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 2073-2335 aa (Q6P2Q9) 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 PRPF8 Protein Fragment (aa 2073-2335) - a specialized research tool containing the essential MPN domain of the pre-mRNA-processing-splicing factor 8. This carefully designed fragment enables focused investigation of domain-specific functions in spliceosome assembly and RNA processing mechanisms. Pre-mRNA-processing-splicing factor 8 (PRPF8) serves as a critical scaffold component in both U2-type and U12-type spliceosomal complexes throughout the splicing cycle. As a core element of precatalytic, catalytic, and postcatalytic spliceosomes, PRPF8 mediates the ordered assembly of spliceosomal proteins and snRNAs, facilitating the formation of the U4/U6-U5 tri-snRNP complex. The protein strategically positions U2, U5, and U6 snRNAs at splice sites on pre-mRNA substrates, interacting with both 5' and 3' splice sites to enable precise splicing. PRPF8 localizes to the nucleus, specifically within nuclear speckles, where it orchestrates these essential RNA processing events. The provided fragment encompasses the MPN domain (aa 2103-2234), allowing researchers to investigate the specific functional contributions of this domain to PRPF8's role in spliceosome architecture and pre-mRNA splicing regulation.