Recombinant MPND protein (His tag)

Catalog Number	547742
Species	Human
Expression System	E. coli
Accession	Q8N594
Molecular Weight	Predictes a molecular mass of 28.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	236-471
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 236-471 aa (Q8N594) 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 MPN domain-containing protein (EC 3.4.-.-) fragment (residues 236-471) from Homo sapiens, encompassing the functional MPN domain. This high-purity protein is ideal for investigating protease activity and m6A DNA recognition, offering researchers a targeted tool for domain-specific functional studies. The full-length MPN domain-containing protein, encoded by the MPND gene, is a probable protease and a critical sensor of N^6-methyladenosine (m6A) methylation on DNA. It recognizes and binds m6A-modified double-stranded DNA in a sequence-independent manner, leading to DNA degradation, as evidenced by studies (PubMed:30982744). This protein plays a role in epigenetic regulation through m6A DNA sensing, highlighting its importance in cellular signaling and nucleic acid metabolism. The recombinant fragment provided focuses on the MPN domain to enable precise exploration of these mechanisms.