Recombinant PPIL1 protein (His tag)

Catalog Number	541608
Synonyms	PPIase; Rotamase PPIL1
Species	Human
Expression System	E. coli
Accession	Q9Y3C6
Molecular Weight	Predictes a molecular mass of 19.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	1-166
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-166 aa (Q9Y3C6) 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 Peptidyl-prolyl cis-trans isomerase-like 1 (PPIase) Fragment (1-166) is a high-quality protein tool designed for studying the complete PPIase cyclophilin-type domain. This fragment retains the essential isomerase activity and spliceosome functionality, making it ideal for research applications in protein folding, RNA splicing, and neurodevelopmental studies. Peptidyl-prolyl cis-trans isomerase-like 1 (PPIase) is a crucial enzyme involved in multiple cellular processes. It functions as a rotamase that accelerates protein folding by catalyzing the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Beyond its isomerase activity, PPIL1 plays a vital role in pre-mRNA splicing as an integral component of the spliceosome. Recent research has revealed its importance in embryonic brain development, interestingly through mechanisms independent of its isomerase activity. The protein is primarily localized to the nucleus, consistent with its roles in RNA processing and gene regulation. The recombinant fragment (1-166) encompasses the complete PPIase cyclophilin-type domain, providing researchers with a focused tool to investigate these specific functional aspects without interference from other protein regions.