Recombinant PRPS1 protein (His tag)

Catalog Number	547121
Synonyms	PPRibP; Phosphoribosyl pyrophosphate synthase I; PRS-I
Species	Human
Expression System	E. coli
Accession	P60891
Molecular Weight	Predictes a molecular mass of 36.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	2-318
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 2-318 aa (P60891) 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	This product is a recombinant fragment of human Ribose-phosphate pyrophosphokinase 1 (PRPS1), encompassing residues 2-318. It represents a stable and soluble unit optimized for structural and biochemical studies, supporting research into nucleotide synthesis pathways. Ribose-phosphate pyrophosphokinase 1 (PRPS1) catalyzes the synthesis of phosphoribosylpyrophosphate (PRPP), a critical substrate essential for nucleotide biosynthesis. This enzyme plays a fundamental role in cellular metabolism by providing PRPP for purine, pyrimidine, and pyridine nucleotide production, as supported by established research (PubMed:16939420, PubMed:17701900, PubMed:7593598). The provided fragment enables focused investigation into the catalytic and structural properties of this key metabolic enzyme.