Recombinant PRPS3 protein (His tag)

Catalog Number	542182
Synonyms	Phosphoribosyl pyrophosphate synthase 1-like 1; PRPS1-like 1; Phosphoribosyl pyrophosphate synthase III; PRS-III
Species	Human
Expression System	E. coli
Accession	P21108
Molecular Weight	Predictes a molecular mass of 36.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	2-318
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 (P21108) 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 recombinant protein product features a stable and soluble fragment (residues 2-318) of human Ribose-phosphate pyrophosphokinase 3 (PRPS1L1), which catalyzes the essential synthesis of phosphoribosylpyrophosphate (PRPP) for nucleotide biosynthesis. The fragment is optimized for structural and biochemical studies. The full-length Ribose-phosphate pyrophosphokinase 3 (encoded by the PRPS1L1 gene) functions as a key enzyme in nucleotide metabolism by catalyzing the synthesis of phosphoribosylpyrophosphate (PRPP). PRPP serves as a critical precursor for the de novo and salvage pathways of nucleotide synthesis, supporting essential cellular processes such as DNA/RNA formation, energy transfer, and cofactor biosynthesis. This enzyme's activity is vital for maintaining nucleotide pools in human cells, underscoring its relevance in metabolic research and potential therapeutic targeting.