Recombinant IPYR protein (His tag)

Catalog Number	548683
Synonyms	Pyrophosphate phospho-hydrolase; PPase
Species	Human
Expression System	E. coli
Accession	Q15181
Molecular Weight	Predictes a molecular mass of 34.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	2-289
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 2-289 aa (Q15181) 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 Inorganic Pyrophosphatase (PPA1) Fragment (residues 2-289) is a highly purified protein designed for structural and biochemical studies. This 288-amino acid fragment represents a stable and soluble unit of the enzyme, optimized for reliable experimental performance in investigating pyrophosphate hydrolysis mechanisms. Inorganic pyrophosphatase (EC 3.6.1.1), encoded by the PPA1 gene in humans, catalyzes the hydrolysis of inorganic pyrophosphate (PPi) to orthophosphate (Pi), a crucial reaction driving energetically unfavorable biosynthetic reactions forward. This enzyme is localized in the cytoplasm, where it plays a vital role in maintaining metabolic flux by preventing pyrophosphate accumulation, thereby supporting essential cellular processes including nucleic acid synthesis, protein synthesis, and carbohydrate metabolism.