Recombinant IPYR2 protein (His tag)

Catalog Number	541244
Synonyms	Pyrophosphatase SID6-306; Pyrophosphate phospho-hydrolase 2; PPase 2
Species	Human
Expression System	E. coli
Accession	Q9H2U2
Molecular Weight	Predictes a molecular mass of 36.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	33-334
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 33-334 aa (Q9H2U2) 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 2, Mitochondrial (PPA2) Fragment (33-334) – a highly stable and soluble protein fragment engineered for structural and biochemical studies. This product captures the essential catalytic domain responsible for inorganic pyrophosphate hydrolysis, enabling precise investigation of mitochondrial energy regulation mechanisms. Inorganic pyrophosphatase 2, mitochondrial (PPA2) is a critical enzyme encoded by the PPA2 gene in humans, functioning as a pyrophosphate phospho-hydrolase (EC 3.6.1.1). It catalyzes the hydrolysis of inorganic pyrophosphate, an activity indispensable for maintaining mitochondrial membrane potential and ensuring proper mitochondrial organization and function. This enzyme is localized exclusively within the mitochondrion, where it supports essential energy metabolism and cellular homeostasis. The provided recombinant fragment (residues 33-334) encompasses the complete functional domain, offering researchers a reliable tool to explore PPA2's role in mitochondrial dynamics and related physiological processes.