Recombinant PPAT protein (His tag)

Catalog Number	541196
Synonyms	Acid phosphatase 4
Species	Human
Expression System	E. coli
Accession	Q9BZG2
Molecular Weight	Predictes a molecular mass of 41.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	27-393
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 27-393 aa (Q9BZG2) 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 Testicular Acid Phosphatase (EC 3.1.3.2, ACP4) Fragment (residues 27-393) is a high-purity, soluble protein designed for structural and biochemical studies. This 367-amino acid fragment retains key functional characteristics, offering researchers a stable tool to investigate phosphatase activity and signaling pathways. Testicular acid phosphatase (Acid phosphatase 4), encoded by the ACP4 gene, is a membrane-anchored enzyme that functions as a single-pass type I membrane protein. It plays a critical role in cellular signaling by dephosphorylating receptor tyrosine-protein kinase ERBB4, thereby inhibiting its ligand-induced proteolytic cleavage. Additionally, ACP4 contributes to odontogenesis, highlighting its importance in dental development. This recombinant fragment represents a stable, soluble unit optimized for experimental applications, enabling detailed mechanistic and structural insights into its regulatory functions.