Recombinant PPAL protein (His tag)

Catalog Number	544381
Synonyms	LAP
Species	Human
Expression System	E. coli
Accession	P11117
Molecular Weight	Predictes a molecular mass of 42.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	31-380
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 31-380 aa (P11117) 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 Lysosomal Acid Phosphatase (LAP) Fragment (residues 31-380) is a high-purity, soluble protein designed for structural and biochemical studies. This 350-amino acid fragment, derived from the ACP2 gene, offers a stable unit ideal for investigating phosphatase activity and lysosomal function in research applications. Lysosomal Acid Phosphatase (LAP), encoded by the ACP2 gene in humans, is a membrane-associated enzyme localized to the lysosome membrane and lumen. As a single-pass membrane protein with its functional domain oriented luminally, LAP plays a critical role in lysosomal phosphate metabolism. The soluble form of the enzyme, generated through proteolytic processing of the membrane-bound form, facilitates phosphate hydrolysis within the acidic lysosomal environment. This recombinant fragment (residues 31-380) represents a stable, soluble unit that preserves key functional characteristics while being optimized for experimental applications.