

# PPA1, human recombinant

<b>CATALOG #:</b>	7818-100	100 µg
<b>ALTERNATE NAMES:</b>	Inorganic pyrophosphatase, IOPPP, PP, PP1, SID6-8061	
<b>SOURCE:</b>	E. Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	35.2 kDa (313 aa, 1-289 aa + His Tag)	
<b>FORM:</b>	Liquid	
<b>FORMULATION:</b>	0.5 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 200 mM NaCl and 2 mM DTT	

**STORAGE CONDITIONS:**

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**DESCRIPTION:**

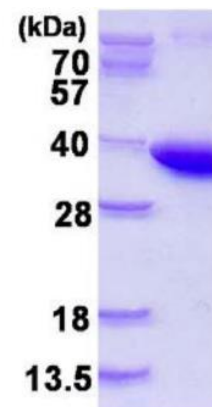
PPA1 (Pyrophosphatase) belongs to the PPase family. This protein is an enzyme that catalyzes the conversion of one molecule of pyrophosphate to two phosphate ions. The hydrolysis of inorganic pyrophosphate (PPi) to two phosphate ions is utilized in many biochemical pathways to render reactions effectively irreversible. Inorganic pyrophosphatase catalyzes this hydrolysis reaction in the early steps of lipid degradation, a prominent example of this phenomenon. By promoting the rapid hydrolysis of pyrophosphate (PPi), Inorganic pyrophosphatase provides the driving force for the activation of fatty acids destined for oxidation. Recombinant human PPA1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**AMINO ACID SEQUENCE:**

MGSSHHHHHH SSSLVPRGSH MGSMSGFST EERAAPFSLE YRVFLKNEKG  
 QYISPFHDIP IYADKDVFHM VVEVPRWSNA KMEIATKDPL NPIKQDVKKG KLRVYVANLFP  
 YKGYIWNYGA IPQTWEDPGH NDKHTGCCGD NDPIDVCEIG SKVCARGEII GVKVLGILAM  
 IDEGETDWKV IAINVDDPDA ANYNDINDVK RLKPGYLEAT VDWFRRYKVP DGKPENEFAP  
 NAEFKDKDFA IDIIKSTHDH WKALVTKKTN GKGISCMNTT LSESPFKCDP DAARAIVDAL

**BIOLOGICAL ACTIVITY:**

Specific activity is >28,000 pmoles/min/µg, and measured by its ability to hydrolyze pyrophosphate per minute at pH 9.0 at 25°C



15% SDS-PAGE (3µg)

Human Recombinant PPA1

**RELATED PRODUCTS:**

- Acid Phosphatase Activity Colorimetric Assay Kit (Cat. No. K411-100)
- Acid Phosphatase Activity Fluorometric Assay Kit (Cat. No. K421-100)
- Alkaline Phosphatase Activity Colorimetric Assay Kit (Cat. No. K412-100)
- Alkaline Phosphatase Activity Fluorometric Assay Kit (Cat. No. K422-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

