

# Recombinant e.coli ppa protein

Catalog Number: ATGP1132

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-176aa

### UniProt No.

P0A7A9

### NCBI Accession No.

NP\_418647

### Alternative Names

inorganic pyrophosphatase, ECK4222, JW4185

## PRODUCT SPECIFICATION

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### Molecular Weight

21.9 kDa (196aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 50mM NaCl

### Purity

> 95% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

Inorganic pyrophosphatase (ppa) belongs to the Ppase family. This protein is an enzyme that catalyzes the conversion of one molecule of pyrophosphate to two phosphate ions. This is a highly exergonic reaction, and therefore can be coupled to unfavorable biochemical transformations in order to drive these transformations to completion. The functionality of this enzyme plays a critical role in lipid metabolism (including lipid synthesis and degradation), calcium absorption and bone formation, and DNA synthesis, as well as other biochemical transformations. Recombinant E. coli ppa protein, fused to His-tag at N-terminus, was expressed in E. coli and

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purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MSLLNVPAGK DLPEDIYVVI EIPANADPIK YEIDKESGAL FVDRFMSTAM FYPCNYGYIN  
HTLSLDGDPV DVLVPTYPL QPGSVIRCRP VGVVKMTDEA GEDAKLVAVP HSKLSKEYDH IKDVNDLPEL LKAQIAHFFE  
HYKDLEKGGW VKVEGWENAE AAKAEIVASF ERAKNK

## General References

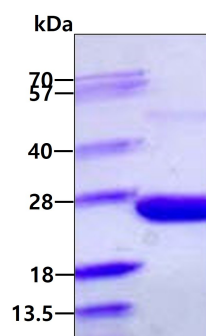
Harold FM., et al (1966) Bacteriol Rev 30 (4): 772-94.

Carman GM., et al (2006) Trends Biochem. Sci. 31 (12): 694-9.

## DATA

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### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.