# Recombinant e.coli ppa protein

Catalog Number: ATGP1132

## PRODUCT INFORMATION

**Expression system**
E.coli

**Domain**
1-176aa

**UniProt No.**
P0A7A9

**NCBI Accession No.**
NP_418647

**Alternative Names**
inorganic pyrophosphatase, ECK4222, JW4185

## PRODUCT SPECIFICATION

**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

**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

purified by using conventional chromatography techniques.

**Amino acid Sequence**

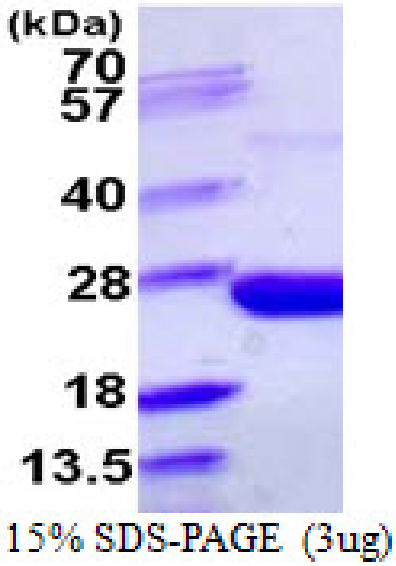
MGSSHHHHHH SSGLVPRGSH MSLLNVPAGK DLPEDIYVVI EIPANADPIK YEIDKESGAL FVDRFMSTAM FYPCNYGYIN HTLSLDGDPV DVLVPTPYPL QPGSVIRCRP VGVLKMTDEA GEDAKLVAVP HSKLSKEYDH IKDVNDLPEL LKAQIAHFFE HYKDLEKGKW VKVEGWENAE AAKAEIVASF ERAKNK

**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

**SDS-PAGE**




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