

**AR39072PU-N****E. coli Pyrophosphatase 1 / PPA1 (1-176, His-tag) - Purified**

<b>Alternate names:</b>	IOPPP, Inorganic pyrophosphatase, PP, PPase, Pyrophosphate phospho-hydrolase
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml (determined by Bradford assay)
<b>Background:</b>	Inorganic pyrophosphatase (PPA1, E.coli 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.
<b>Uniprot ID:</b>	<a href="#">P0A7A9</a>
<b>NCBI:</b>	<a href="#">AP_004726</a>
<b>GeneID:</b>	<a href="#">948748</a>
<b>Species:</b>	E. coli
<b>Source:</b>	E. coli
<b>Format:</b>	<b>State:</b> Liquid purified protein <b>Purity:</b> >95% <b>Buffer System:</b> 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 50mM NaCl
<b>Description:</b>	Recombinant E.coli ppa protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. <b>AA Sequence:</b> <u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> MSLLNVPAGK DLPEDIYVVI EIPANADPIK YEIDKESGAL FVDRFMSTAM FYPCNYGYIN HTLSLDGDPV DVLVPTPYPL QPGSVIRCRP VGVLKMTDEA GEDAKLVAVP HSKLSKEYDH IKDVNDLPEL LKAQIAHFFE HYKDLEKGGW VKVEGWENAE AAKAEIVASF ERAKNK <b>Molecular weight:</b> 21.9 kDa (196aa), confirmed by MALDI-TOF
<b>Storage:</b>	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	Carman GM., et al (2006) Trends Biochem. Sci. 31 (12): 694–9.

**Pictures:**

Recombinant E.coli ppa, 1-176aa, His-tagged

