

PPA1, human recombinant protein
Inorganic pyrophosphatase, IOPPP, PP, PP1, SID6-8061
Catalog # PBV11377r

Specification

PPA1, human recombinant protein - Product info

Primary Accession	O15181
Concentration	0.5
Calculated MW	35.2 kDa (313 aa, 1-289 aa + His Tag) kDa

PPA1, human recombinant protein - Additional Info

Gene ID	5464
Gene Symbol	PPA1
Other Names	
Inorganic pyrophosphatase, IOPPP, PP, PP1, SID6-8061	
Gene Source	Human
Source	E.coli
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Results	Specific activity is >28,000 pmoles/min/ µg
Sequence	MGSSHHHHHH SSGLVPRGSH MGS HMSGFST EERAAPFSLE YRVFLKNEKG QYISPFHDIP IYADKDV FHM VVEVPRWSNA KMEIATKDPL NPIKQDVKKG KLRYVANLFP YKGYIWN YGA IPQ TWEDPGH NDKHTGCCGD NDPIDVCEIG SKVCARGEII GVKVLGILAM IDEGETDWKV IAINVDDPDA ANYNDINDVK RLKPGYLEAT VDWFRRYKVP DGKPENEF AF NAEFKDKDFA IDIIKSTHDH WKALVT KKTN GKGISCMNTT LSESPFKCDP DAARAIVDAL PPPCESACTV PTDVKWFHH QKN

Target/Specificity

PPA1

Format

Liquid

Storage

-20°C; 0.5 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 200 mM NaCl and 2 mM DTT

PPA1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPA1, human recombinant protein - Images

PPA1, human recombinant protein - Background

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.

PPA1, human recombinant protein - References

Fairchild T.A.,et al.Biochim. Biophys. Acta 1447:133-136(1999).
Saito T.,et al.Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
Kanni L.,et al.Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
Dai F.Y.,et al.Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).