

## **Product datasheet for AR51806PU-S**

## OriGene Technologies, Inc.

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## Inositol monophosphatase 3 / IMPA3 (34-359, His-tag) Human Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Inositol monophosphatase 3 / IMPA3 (34-359, His-tag) human recombinant protein, 10 μg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

VLAAVRGGDE VRRVRESNVL HEKSKGKTRE GAEDKMTSGD VLSNRKMFYL LKTAFPSVQI NTEEHVDAAD QEVILWDHKI PEDILKEVTT PKEVPAESVT VWIDPLDATQ EYTEDLRKYV TTMVCVAVNG KPMLGVIHKP FSEYTAWAMV DGGSNVKARS SYNEKTPRIV VSRSHSGMVK QVALQTFGNQ TTIIPAGGAG YKVLALLDVP DKSQEKADLY IHVTYIKKWD ICAGNAILKA

MGSSHHHHHH SSGLVPRGSH MGSGRFSLFG LGGEPGGGAA GPAAAADGGT VDLREMLAVS

LGGHMTTLSG EEISYTGSDG IEGGLLASIR MNHQALVRKL PDLEKTGHK

Tag: His-tag

Predicted MW: 37.6 kDa

Concentration: lot specific

Purity: >90% by SDS - PAGE

**Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: Phosphate Buffered Saline (pH 7.4)

**Bioactivity:** Specific: Specific acitivty > 3300 pmole/min/ug, its ability to dephosphorylate adenosine 3'5'-

diphosphate sodium slat at pH 7.5, 25C.

**Preparation:** Liquid purified protein

**Applications:** Protocol: 1. Prepare 1mM PAP in 20mM Tris-HCl (PH 7.5), 15mM MgCl2. 2. Dilute IMPAD1

various concentration (20ug/ml, 10ug/ml, 5ug/ml) in 20mM Tris-HCl (PH 7.5), 15mM MgCl2, containing blank of 20mM Tris-HCl, 15mM MgCl2 3. Make the Phosphate standard range of 0.31 nmol to 20 nmol per well. 4. Load 25 ul of 1mM PAP add 25 ul of diluted IMPAD1 to well and load 50 ul of phosphate standard. 5. Incubate for 15 minute at 25C. 6. Add 150 ul of Malachite green solution mix and incubate for 15 minute at 25C. 7. Read at 650nm. - Malachite green solution: Ammonium molybdate 675 mg, Malachite green carbinol

hydrochloride 3.3 mg in 50 ml of 1M H2SO4.





**Protein Description:** Recombinant human IMPAD1 protein, fused to His-tag at N-terminus, was expressed in E.coli

and purified by conventional chromatography, after refolding of the isolated inclusion bodies

in a renaturation buffer.

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**RefSeq:** NP 060283

**Locus ID:** 54928

UniProt ID: <u>Q9NX62</u>, <u>A0A024R7W0</u>

Cytogenetics: 8q12.1

**Synonyms:** GPAPP; IMP-3; IMPA3; IMPAD1

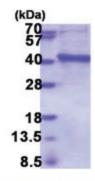
**Summary:** This gene encodes a member of the inositol monophosphatase family. The encoded protein

is localized to the Golgi apparatus and catalyzes the hydrolysis of phosphoadenosine phosphate (PAP) to adenosine monophosphate (AMP). Mutations in this gene are a cause of GRAPP type chondrodysplasia with joint dislocations, and a pseudogene of this gene is

located on the long arm of chromosome 1. [provided by RefSeq, Dec 2011]

**Protein Families:** Transmembrane

## **Product images:**



15% SDS-PAGE (3ug)