

# Recombinant human PHOSPHO2 protein

Catalog Number: ATGP1367

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-241aa

### UniProt No.

Q8TCD6

### NCBI Accession No.

NP\_001008489

### Alternative Names

Pyridoxal phosphate phosphatase PHOSPHO2, MGC111048, MGC22679, phosphatase orphan 2

## PRODUCT SPECIFICATION

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### Molecular Weight

30.3 kDa (265aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

### Purity

> 85% 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

Pyridoxal phosphate phosphatase PHOSPHO2, orphan 2, also known as PHOSPHO2, belongs to the haloacid dehalogenase (HAD) superfamily. Phosphatase has a high activity toward phosphoethanolamine (PEA) and phosphocholine (PCho). PHOSPHO 1, a phosphoethanolamine/phosphocholine phosphatase, is upregulated in mineralising cells and is thought to be involved in the generation of inorganic phosphate for bone mineralization. PHOSPHO2 is a putative phosphatase sharing 42% sequence identity with PHOSPHO1. PHOSPHO1 and PHOSPHO2 are very similar, but surprisingly, recombinant PHOSPHO2 hydrolyses phosphoethanolamine and

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phosphocholine relatively poorly. Recombinant human PHOSPHO2 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

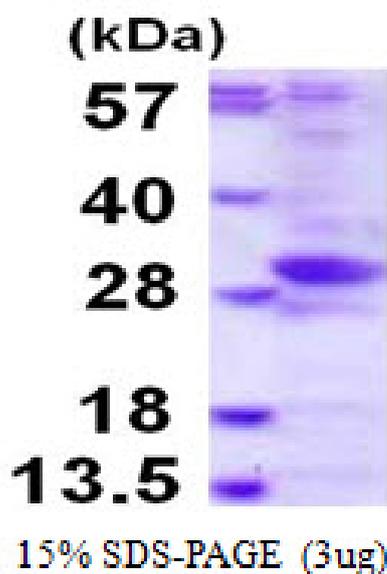
MGSSHHHHHHH SSGLVPRGSH MGSHMKILLV FDFDNTIIDD NSDTWIVQCA PNKKLPIELR DSYRKGFWTE FMGRVFKYLG  
DKGVREHEMK RAVTSLPFTP GMVELFNFIR KNKDKFDCII ISDSNSVFID WVLEAASFHD IFDKVFTNPA AFNSNGHLTV  
ENYHTHSCNR CPKNLCKKVV LIEFVDKQLQ QGVNYTQIVY IGDGGNDVCP VTFLKNDDVA MPRKGYTLQK TLRMSQNLE  
PMEYSVVVWS SGVDIISHLQ FLIKD

## General References

Roberts SJ., et al. (2005) *Biochim Biophys Acta*. 1752(1):73-82.  
Stewart A J., et al. (2003) *Protein Eng*. 16(12):889-95.

## DATA

### SDS-PAGE



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