

Recombinant Human Phosphatase, Orphan 2, His-tagged

Cat. No. PHOSPHO2-1574H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PHOSPHO2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
Description	Pyridoxal phosphate phosphatase PHOSPHO2, orphan 2, also known as PHOSPHO 2, belongs to the haloaciddehalogenase(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 phosphocholine relatively poorly.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl.
Molecular Weight	30.3 kDa (265aa), confirmed by MALDI-TOF.
Purity	>85% by SDS-PAGE
Concentration	0.25 mg/ml (determined by Bradford assay)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Sequences of amino acids

MGSSHHHHHH SSGLVPRGSH MGSHMKILLV FDFDNTIIDD NSDTWIVQCA
 PNKKLPIELR DSYRKGFWTE FMGRVFKYLG DKGVREHEMKRAVTSLPFTP
 GMVELFNFIR KNKDKFDCII ISDSNSVFID WVLEAASFHD IFDKVFTNPA
 AFNSNGHLTV ENYHTHSCNR CPKNLCKKV V LIEFVDKQLQ QGVNYTQIVY
 IGDGGNDVCP VTFLKNDDVA MPRKGYTLQK TLSRMSQNLE PMEYSVVVWS
 SGVDIISHLQ FLIKD

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Pathways

Metabolic pathways; Vitamin B6 metabolism

GENE INFORMATION

Gene Name

PHOSPHO2 phosphatase, orphan 2 [Homo sapiens]

Official Symbol

PHOSPHO2

Synonyms

PHOSPHO2; phosphatase, orphan 2; MGC22679; MGC111048; pyridoxal phosphate phosphatase PHOSPHO2; OTTHUMP00000204769; OTTHUMP00000204770; OTTHUMP00000204771; OTTHUMP00000204772; EC 3.1.3.74; MGC111048

Gene ID

493911

mRNA Refseq

NM_001008489

Protein Refseq

NP_001008489

UniProt ID

Q8TCD6

Chromosome

2q31.1

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Location**Function**

hydrolase activity; metal ion binding; pyridoxal phosphatase activity

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