

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)

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Sequences of amino acids

MGSSHHHHHH SSSLVPRGSH MGSHMKILLV FDFDNTIIDD NSDTWIVQCA
 PNKKLPIELR DSYRKGFWTE FMGRVFKYLG DKGVREHEMKRAVTSLPFTP
 GMVELFNFIR KNKDKFDCII ISDSNSVFID WVLEAASFHD IFDKVFTNPA
 AFNSNGHLTV ENYHTHSCNR CPKNLCKKVV 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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