

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 SSGLVPRGSH MGSHMKILLV FDFDNTIIDD NSDTWIVQCA PNKKLPIELR DSYRKGFWTE FMGRVFKYLG DKGVREHEMKRAVTSLPFTP GMVELFNFIR KNKDKFDCII ISDSNSVFID WVLEAASFHD IFDKVFTNPA AFNSNGHLTV ENYHTHSCNR CPKNLCKKVV LIEFVDKQLQ QGVNYTQIVY IGDGGNDVCP VTFLKNDDVA MPRKGYTLQK TLSRMSQNLE PMEYSVVVWS SGVDIISHLQ FLIKD
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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.
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Pathways	Metabolic pathways; Vitamin B6 metabolism
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GENE INFORMATION

Gene Name	PHOSPHO2 phosphatase, orphan 2 [Homo sapiens]
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Official Symbol	PHOSPHO2
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Synonyms	PHOSPHO2; phosphatase, orphan 2; MGC22679; MGC111048; pyridoxal phosphate phosphatase PHOSPHO2; OTTHUMP00000204769; OTTHUMP00000204770; OTTHUMP00000204771; OTTHUMP00000204772; EC 3.1.3.74; MGC111048
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Gene ID	493911
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mRNA Refseq	NM_001008489
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Protein Refseq	NP_001008489
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UniProt ID	Q8TCD6
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Chromosome	2q31.1
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Location**Function**

hydrolase activity; metal ion binding; pyridoxal phosphatase activity

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