



Recombinant Mouse Pyridoxal phosphate phosphatase (Pdpx)

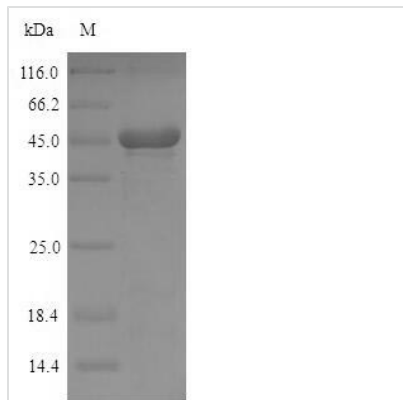
Product Code	CSB-EP017749MO
Relevance	Protein serine phosphatase that dephosphorylates 'Ser-3' in cofilin and probably also dephosphorylates phospho-serine residues in DSTN. Regulates cofilin-dependent actin cytoskeleton reorganization. Required for normal progress through mitosis and normal cytokinesis (By similarity). Does not dephosphorylate phospho-threonines in LIMK1. Does not dephosphorylate peptides containing phospho-tyrosine. Pyridoxal phosphate phosphatase. Has some activity towards pyridoxal 5'-phosphate (PLP), pyridoxine 5'-phosphate (PNP) and pyridoxine 5'-phosphate (PNP), with a highest activity with PLP followed by PNP.
Abbreviation	Recombinant Mouse Pdpx protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P60487
Alias	PLP phosphatase Alternative name(s): Chronophin
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MARCELRGAALRDVLGQAQGVLFDCDGVWNGERIVPGAPELLQRLARAG KNTLFVSNNSRRARPELALRFARLGFAGLRAEQLFSSALCAARLLRQRLSGPP DASGAVFVLGGEGRLRAELRAAGLRLAGDPGEDPRVRAVLVGYDEQFSFSRLT EACAHLRDPDCLLVATDRDPWHPLSDGSRTPGTGSLAAAVETASGRQALVVG KPSPYMFQCITEDFSVDPARTLMVGDRLETDILFGHRCGMMTVTLTGVSSE EAQAYLTAGQRDLVPHYVYESIADLMEGLED
Research Area	Signal Transduction
Source	E.coli
Target Names	Pdpx
Protein Names	Recommended name: Pyridoxal phosphate phosphatase Short name= PLP phosphatase EC= 3.1.3.3 EC= 3.1.3.74 Alternative name(s): Chronophin
Expression Region	1-292aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	47.5kDa



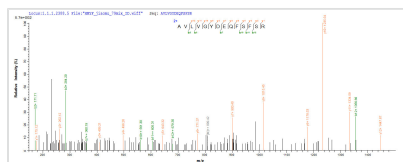
Protein Length

Full Length

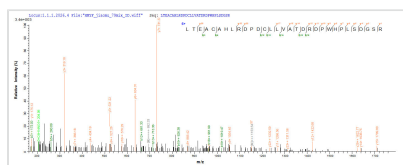
Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP017749MO could indicate that this peptide derived from E.coli-expressed Mus musculus (Mouse) Pdxp.



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Description

This Mouse Pdxp recombinant protein was produced in E.coli, where the gene sequence encoding Mouse Pdxp (1-292aa) was expressed with the N-terminal 6xHis-SUMO tag. The purity of this Pdxp protein was greater than 90% by SDS-PAGE.

Pdxp is a phosphatase enzyme with a primary function of removing phosphate groups from vitamin B6, converting pyridoxal phosphate (PLP) to pyridoxal (PL). This reaction is a crucial step in the metabolism of vitamin B6. Vitamin B6 and its active form, PLP, are essential for maintaining various physiological functions, including amino acid metabolism, neurotransmission, and hemoglobin synthesis. Pdxp, by regulating PLP levels, is involved in these important biochemical pathways. Vitamin B6 deficiency can lead to various health problems, including anemia, neurological issues, and immune system disorders. Therefore, understanding vitamin B6 metabolism and studying enzymes like Pdxp holds potential significance for the treatment of these diseases.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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