Recombinant Human PDP1, MYC/DDK-tagged

Cat. No. PDP1-695H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human phosphatase 2C, magnesium-dependent, catalytic subunit (PPM2C), nuclear gene encoding mitochondrial protein, fused with C-terminal MYC/DDK, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	Pyruvate dehydrogenase (E1) is one of the three components (E1, E2, and E3) of the large pyruvate dehydrogenase complex. Pyruvate dehydrogenase kinases catalyze phosphorylation of serine residues of E1 to inactivate the E1 component and inhibit the complex. Pyruvate dehydrogenase phosphatases catalyze the dephosphorylation and activation of the E1 component to reverse the effects of pyruvate dehydrogenase kinases. Pyruvate dehydrogenase phosphatase is a heterodimer consisting of catalytic and regulatory subunits. Two catalytic subunits have been reported; one is predominantly expressed in skeletal muscle and another one is is much more abundant in the liver. The catalytic subunit, encoded by this gene, is the former, and belongs to the protein phosphatase 2C (PP2C) superfamily. Along with the pyruvate dehydrogenase complex and pyruvate dehydrogenase kinases, this enzyme is located in the mitochondrial matrix. Mutation in this gene causes pyruvate dehydrogenase phosphatase deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been identified.
Molecular Mass	60.9 kDa

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Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration	>50 ug/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	PDP1 pyruvate dehyrogenase phosphatase catalytic subunit 1 [Homo sapiens (human)]
Official Symbol	PDP1
Synonyms	PDP1; pyruvate dehyrogenase phosphatase catalytic subunit 1; PDP 1; PDPC 1; [Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 1, mitochondrial; protein phosphatase 2C, magnesium-dependent, catalytic subunit; pyruvate dehydrogenase (Lipoamide) phosphatase-phosphatase; pyruvate dehydrogenase phosphatase catalytic subunit 1; PDH; PDP; PDPC; PPM2C; FLJ32517; FLJ56179; MGC119646; EC 3.1.3.43
Gene ID	54704
mRNA Refseq	NM_018444
Protein Refseq	NP_060914
MIM	605993
UniProt ID	Q9P0J1
Chromosome	8q22.

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Location	
Pathway	Metabolism; Pyruvate metabolism; Regulation of pyruvate dehydrogenase (PDH) complex
Function	[pyruvate dehydrogenase (lipoamide)] phosphatase activity; metal ion binding; protein serine/threonine phosphatase activity

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