

Phosphoenolpyruvate Carboxykinase (PCK1), Human Recombinant

CATALOG NO:	P1229-10	10 µg
	P1229-50	50 µg
	P1229-250	250 µg
ALTERNATE NAMES:	PEPCK, PEPCK-C	
SOURCE:	<i>E. coli</i>	
SEQUENCE:	Pro 2 – Met 622	
PURITY:	≥95% by SDS-PAGE analysis	
MOL. WEIGHT:	71.3 kDa, His-tagged protein (N-term)	
FORM:	Lyophilized	
FORMULATION:	Freeze-dried from proprietary buffer	
RECONSTITUTION:	Reconstitute to 2 mg/mL in 30% glycerol, store at -20°C in aliquots and use within 2 months. Avoid repeated freeze-thaw cycles.	
STORAGE CONDITIONS:	Store at -20°C in aliquots. Avoid repeated freeze-thaw cycles. Stable for at least 2 years as supplied.	
DESCRIPTION:	Phosphoenolpyruvate Carboxykinase (PCK1) belongs to the lyase family. In the presence of GTP, it catalyzes the reversible conversion of oxaloacetate (OAA) into phosphoenolpyruvate (PEP), GDP and CO ₂ . In humans, two isoforms of PEPCK are found: cytosolic form (PCK1, also called PEPCK-C) and mitochondrial form (PEPCK-M). PCK1 is a control point enzyme which catalyzes a irreversible step in gluconeogenesis.	
SPECIFIC ACTIVITY:	The enzyme has a specific activity of >100 mU/mg	
UNIT DEFINITION:	One unit is the amount of enzyme that transfers a phosphate group from PEP to GDP and generates 1.0 µmol of pyruvate per minute at pH 7.5 at 37°C	

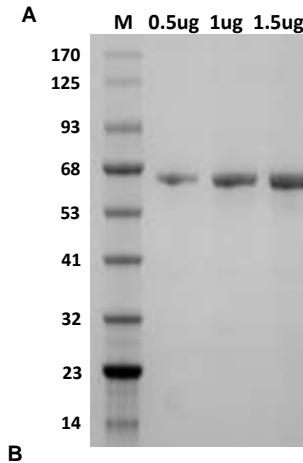


Fig. A. SDS-PAGE (4-20%) of Recombinant PCK1: Recombinant PCK1 loaded under reducing conditions and stained with Coomassie Blue. Lane M-MW marker, Lanes 2-4 PCK1

B

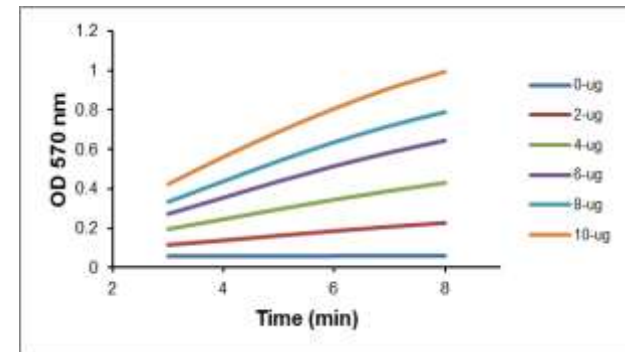


Fig. B. PCK1 activity assay: Activity of recombinant PCK1 was measured by a multi-steps assay. In this assay, PCK1 converts phosphoenolpyruvate into oxaloacetate, then coupling with series of enzymatic reactions to generate pyruvate, which in turn reacts with a probe and developer to generate color (OD570 nm). Legend on the right indicated the amount of recombinant PCK1

RELATED PRODUCT:

- Apolipoprotein E, Human Plasma (**Cat. No. 7284**)
- Lipoprotein, Human Plasma, Low Density (**Cat. No. 4931**)
- Human CellExp™ PCSK9, murine recombinant (**Cat. No. 7266**)
- Human CellExp™ PCSK9, human recombinant (**Cat. No. 7265**)

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