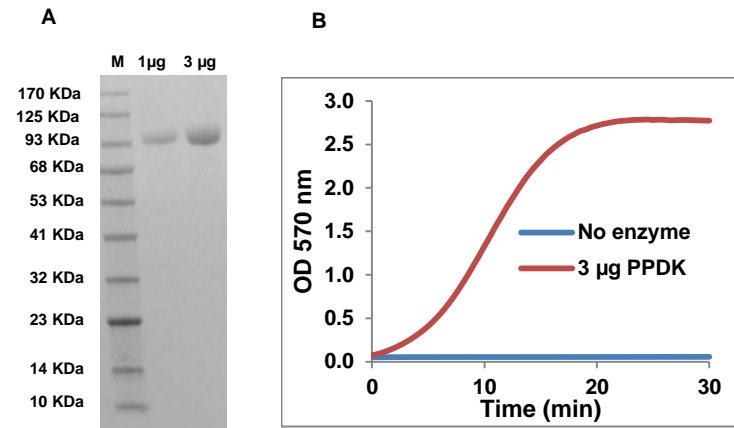


## PPDK, Active, *M. rosea* Recombinant

<b>CATALOG NO:</b>	P1161-50	50 µg
<b>ALTERNATE NAMES:</b>	Pyruvate Phosphate Dikinase, Pyruvate, orthophosphate dikinase	
<b>SOURCE:</b>	<i>E.coli</i>	
<b>PURITY:</b>	> 90% by SDS-PAGE	
<b>SEQUENCE:</b>	The sequence is of <i>Microbispora rosea</i> (1-878 aa)	
<b>MOL. WEIGHT:</b>	The protein is fused with a polyhistidine tag at the N-terminus and the protein has a calculated MW of 95.5 kDa (1-878 aa).	
<b>FORM:</b>	Liquid	
<b>FORMULATION:</b>	Proprietary buffer	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. Use within 6 months.	
<b>DESCRIPTION:</b>	<p>Pyruvate phosphate dikinase, PPDK, (E.C. 2.7.9.1) is found in certain microorganisms and plants. PPDK catalyzes the interconversion of AMP, P<sub>Pi</sub>, and phosphoenolpyruvate (PEP) to ATP, P<sub>i</sub>, and pyruvate monophosphate. PPDK plays an important role in the glycolytic pathway and in organisms where pyruvate kinase (PK) is absent. PPDK functions in the process of ATP synthesis. BioVision's active PPDK is suitable for functional assays, high-throughput screening and preclinical studies in drug discovery.</p>	
<b>SPECIFIC ACTIVITY:</b>	<p>≥ 0.5 U/mg. One unit of enzyme converts 1 µmole of AMP, P<sub>Pi</sub>, and phosphoenolpyruvate (PEP) to ATP, P<sub>i</sub> and pyruvate monophosphate at 37°C and pH 7.0.</p>	



**Fig A. SDS-PAGE (4-20%) of Recombinant PPDK:** Recombinant Protein loaded under reducing conditions and stained with Coomassie Blue. Lanes are as follows: M - MW markers, 1 and 3 µg – purified PPDK. The protein shows a predicted MW of ~ 95.5 kDa

**Fig B. PPDK activity assay:** Specific activity of PPDK ≥0.8 U/mg. PPDK reacts with 0.5 mM of P<sub>Pi</sub> at pH 7 and 37°C. Pyruvate production rate was detected at 570 nm.

### RELATED PRODUCTS:

- ATP Colorimetric/Fluorometric Assay Kit (**Cat. No. K354**)
- ADP/ATP Ratio Bioluminescence Assay Kit, ApoSENSOR (**Cat. No. K255**)
- ADP Colorimetric/Fluorometric Assay Kit (**Cat. No. K355-100**)
- Adenylate Kinase (AK) Activity Colorimetric/Fluorometric Assay Kit (**Cat. No. K350-100**)
- Pyruvate Kinase Activity Colorimetric/Fluorometric Assay Kit (**Cat. No. K709-100**)
- Creatine Kinase (CK) Activity Colorimetric Assay Kit (**Cat. No. K777-100**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**