Creative Enzymes®

Thermostable Bacterial PPK2 Class III Polyphosphate Kinase, 32.8 kDa

Cat. No. CEGZ-6413

Lot. No. (See product label)

Introduction

Description	A recombinant bacterial class III PPK2 polyphosphate kinase with a molecular mass of 32.8 kDa and thermal stability up to 50°C.
Applications	For research and in vitro polyphosphate-driven phosphorylation of nucleotide mono- and diphosphates and ATP regeneration.
Synonyms	PPK2 class III; polyphosphoric acid kinase; polyP kinase; ATP:polyphosphate phosphotransferase

Product Information

Species	Bacterial
Source	Recombinant E. coli
Form	Liquid
EC Number	EC 2.7.4.1
CAS No.	9026-44-2
Molecular Weight	32.8 kDa
Thermal stability	Thermostable up to 50°C
Specificity	PPK2 class III; nucleoside monophosphates and diphosphates. Hyperphosphorylation beyond three 5'-phosphate groups may occur.
Substrates	AMP; ADP; other nucleoside monophosphates and diphosphates; polyphosphate
Reaction	ADP + (phosphate)n = ATP + (phosphate)n-1 AMP + (phosphate)n = ADP + (phosphate)n-1
Notes	Can be used for ATP regeneration. Recombinant protein produced in E. coli and purified by His6-tag affinity chromatography. Optimal reaction time and enzyme concentration may vary depending on the substrate.
Protocol	70 mM Tris-HCl, pH 7.6 (at 37°C) 10 mM MgCl2 5 mM AMP 6 mM polyphosphate 0.04 g/L enzyme 37°C, 2 h
Usage	Research and in vitro use only.

Storage and Shipping Information

Storage	-20°C