

Mesophilic Bacterial PPK2 Class I Polyphosphate Kinase

Cat. No. CEGZ-6411

Lot. No. (See product label)

Introduction

Description

A recombinant bacterial class I PPK2 polyphosphate kinase designed for polyphosphate-driven phosphorylation of nucleoside diphosphates.

Applications

For research and in vitro ATP regeneration and phosphorylation of nucleoside diphosphates using polyphosphate as the phosphate source.

Synonyms

PPK; PPK2 class I; polyphosphoric acid 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

32.4 kDa

Specificity

PPK2 class I; preferential polyphosphate-driven phosphorylation of nucleoside diphosphates.

Substrates

ADP; polyphosphate

Reaction

$\text{ADP} + (\text{phosphate})_n = \text{ATP} + (\text{phosphate})_{n-1}$

Notes

Mesophilic enzyme suitable 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 ADP 6 mM polyphosphate
0.04 g/L enzyme 37°C, overnight

Usage

Research and in vitro use only.

Storage and Shipping Information

Storage

-20°C