

Thermostable Bacterial Acetate Kinase, 80°C

Cat. No. CEGZ-6415

Lot. No. (See product label)

Introduction

Description A recombinant bacterial acetate kinase with thermal stability up to 80°C and broad nucleotide diphosphate acceptance for phosphate-transfer workflows.

Applications For research and in vitro phosphorylation of natural nucleoside diphosphates to the corresponding triphosphates using acetyl phosphate, including ATP regeneration systems.

Synonyms AcK; acetokinase; AckA; AK; acetic kinase; ATP:acetate phosphotransferase

Product Information

Species Bacterial

Source Recombinant E. coli

Form Liquid

EC Number EC 2.7.2.1

CAS No. 9027-42-3

Molecular Weight 46.1 kDa

Thermal stability Thermostable up to 80°C

Specificity Natural (d)NDPs as phosphate acceptors; acetyl phosphate as donor.

Substrates ADP; acetyl phosphate; natural nucleoside diphosphates

Reaction ADP + acetyl phosphate = ATP + acetate

Notes Recombinant protein produced in E. coli and purified by heat treatment and 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 acetyl phosphate 0.04 g/L enzyme 37°C, 2 h

Usage Research and in vitro use only.

Storage and Shipping Information

Storage -20°C