

Thermostable Prokaryotic Guanylate Kinase, 80°C

Cat. No. CEGZ-6401

Lot. No. (See product label)

Introduction

Description A recombinant prokaryotic guanylate kinase with broad nucleotide acceptance and thermal stability up to 80°C.

Applications For research and in vitro phosphorylation of GMP and related purine monophosphates under standard or elevated-temperature conditions.

Synonyms GMPK; deoxyguanylate kinase; guanosine monophosphate kinase; 5'-GMP kinase; ATP:GMP phosphotransferase; ATP:(d)GMP phosphotransferase

Product Information

Species Bacterial

Source Recombinant E. coli

Form Liquid

EC Number EC 2.7.4.8

CAS No. 9026-59-9

Molecular Weight 25.4 kDa

Thermal stability Thermostable up to 80°C

Specificity GMP and dGMP; also AMP and, to a small extent, dAMP. ATP and dATP can serve as donors.

Substrates ATP or dATP; GMP; dGMP; AMP; dAMP

Reaction $\text{ATP} + \text{GMP} = \text{ADP} + \text{GDP}$

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 50°C) 10 mM MgCl₂ 5 mM GMP 6 mM ATP 0.04 g/L enzyme 50°C, overnight

Usage Research and in vitro use only.

Storage and Shipping Information

Storage -20°C