Creative Enzymes®

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	ATP + GMP = ADP + 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