

Viral dNMP Kinase, Recombinant

Cat. No. CEGZ-6406

Lot. No. (See product label)

Introduction

Description

A recombinant mesophilic deoxynucleoside monophosphate kinase of viral origin with activity toward dTMP, dGMP, and selected nucleotide analogs.

Applications

For research and in vitro phosphorylation of deoxynucleoside monophosphates and selected nucleotide analogs.

Synonyms

dNMPK; deoxynucleoside monophosphate kinase; ATP:deoxynucleoside-phosphate phosphotransferase

Product Information

Species

Viral

Source

Recombinant E. coli

Form

Liquid

EC Number

EC 2.7.4.13

CAS No.

37278-20-9

Molecular Weight

28.6 kDa

Specificity

dTMP, dGMP, and some nucleotide analogs; ATP and dATP can act as donors.

Substrates

ATP or dATP; dTMP; dGMP

Reaction

ATP + dTMP = ADP + dTDP
ATP + dGMP = ADP + dGDP

Notes

Mesophilic enzyme. 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 dTMP 6 mM ATP 0.04 g/L enzyme 37°C, overnight

Usage

Research and in vitro use only.

Storage and Shipping Information

Storage

-20°C