

Thermostable Bacterial Thymidine Kinase, 80°C

Cat. No. CEGZ-6397

Lot. No. (See product label)

Introduction

Description

A recombinant bacterial thymidine kinase distinguished by high thermal stability and a broad nucleoside acceptor profile.

Applications

For research and in vitro phosphorylation of thymidine, related nucleosides, and selected nucleoside derivatives to the corresponding monophosphates.

Synonyms

TK; 2'-deoxythymidine kinase; ATP:thymidine 5'-phosphotransferase

Product Information

Species

Bacterial

Source

Recombinant E. coli

Form

Liquid

EC Number

EC 2.7.1.21

CAS No.

9002-06-6

Molecular Weight

22.1 kDa

Thermal stability

Thermostable up to 80°C

Specificity

Thymidine and derivatives; additional acceptors include deoxycytidine, deoxyguanosine, deoxyinosine, uridine, and deoxyuridine. ATP is the primary donor; dGTP can also act as donor.

Substrates

ATP; thymidine

Reaction

ATP + thymidine = ADP + dTMP

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.

Usage

Research and in vitro use only.

Storage and Shipping Information

Storage

-20°C