Creative Enzymes®

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