Creative Enzymes®

Recombinant Human UMP/CMP Kinase CMPK1

Cat. No. CEGZ-6408

Lot. No. (See product label)

Introduction

Description	A recombinant human CMPK1 enzyme that functions as a bifunctional UMP/CMP kinase in pyrimidine nucleotide metabolism.
Applications	For research and in vitro phosphorylation of CMP, UMP, and dCMP in studies of pyrimidine nucleotide biosynthesis and salvage.
Synonyms	hCMPK1; U/CMPK; UCK; cytidylate kinase; cytidine monophosphate kinase; CMP kinase; CTP:CMP phosphotransferase; deoxycytidylate kinase; deoxycytidine monophosphate kinase; dCMP kinase; uridylate kinase; uridine monophosphate kinase; pyrimidine nucleoside monophosphate kinase; ATP:UMP-CMP phosphotransferase

Product Information

Species	Homo sapiens
Source	Recombinant E. coli
Form	Liquid
EC Number	EC 2.7.4.14
CAS No.	37278-21-0
Molecular Weight	23.6 kDa
Specificity	CMP and UMP with similar efficiency; dCMP is also accepted.
Substrates	ATP; CMP; UMP; dCMP
Reaction	ATP + (d)CMP = ADP + (d)CDP ATP + UMP = ADP + UDP
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 CMP 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