Creative Enzymes®

Eukaryotic UMP Kinase, Recombinant

Cat. No. CEGZ-6405

Lot. No. (See product label)

Introduction

Description	A recombinant mesophilic eukaryotic UMP kinase with activity toward UMP, dUMP, and selected purine and pyrimidine monophosphates.
Applications	For research and in vitro phosphorylation of UMP, dUMP, and related nucleotide monophosphates under mesophilic conditions.
Synonyms	UMPK; uridylate kinase; uridine monophosphate kinase; ATP:UMP phosphotransferase

Product Information

Species	Eukaryotic
Source	Recombinant E. coli
Form	Liquid
EC Number	EC 2.7.4.22
CAS No.	9036-23-1
Molecular Weight	24.2 kDa
Specificity	UMP and dUMP; lower activity toward GMP, dGMP, and TMP. ATP and dATP can act as donors.
Substrates	ATP or dATP; UMP; dUMP; GMP; dGMP; TMP
Reaction	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 UMP 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