

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 $\text{ATP} + \text{UMP} = \text{ADP} + \text{UDP}$

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