Creative Enzymes®

Recombinant Human Uridine/Cytidine Kinase UCK2

Cat. No. CEGZ-6398

Lot. No. (See product label)

Introduction

Description	A recombinant human UCK2 isoform 1 enzyme that phosphorylates pyrimidine ribonucleosides with defined selectivity against deoxyribonucleosides and purine ribonucleosides.
Applications	For research and in vitro phosphorylation of uridine, cytidine, and related pyrimidine ribonucleoside analogs to their monophosphate forms.
Synonyms	hUCK2; UCK; URK1; pyrimidine ribonucleoside kinase; uridine-cytidine kinase; uridine kinase; uridine phosphokinase; ATP:uridine 5'-phosphotransferase; ATP:uridine/cytidine 5'-phosphotransferase

Product Information

Species	Homo sapiens
Source	Recombinant E. coli
Form	Liquid
EC Number	EC 2.7.1.48
CAS No.	9026-39-5
Molecular Weight	30.7 kDa
Specificity	Uridine, cytidine, and related pyrimidine ribonucleoside analogs; does not phosphorylate deoxyribonucleosides or purine ribonucleosides.
Substrates	ATP; uridine; cytidine
Reaction	ATP + uridine = ADP + UMP ATP + cytidine = ADP + CMP
Notes	Mesophilic enzyme with broad acceptance of pyrimidine ribonucleotides. 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 $MgCl_2$ 5 mM uridine 6 mM ATP 0.04 g/L enzyme 37°C, 1 h
Usage	Research and in vitro use only.

Storage and Shipping Information

Storage	-20°C