Creative Enzymes®

Thermostable Archaeal ADP-Specific Glucose/Glucosamine Kinase

Cat. No. CEGZ-6419

Lot. No. (See product label)

Introduction

Description	A thermostable archaeal kinase that specifically uses ADP to phosphorylate glucose and glucosamine.
Applications	For research and in vitro preparation of glucose 6-phosphate or glucosamine 6-phosphate using ADP-dependent phosphorylation.
Synonyms	GK; ADP-specific glucokinase; ADP-dependent glucokinase; ADP:D-glucose/D-glucosamine 6-phosphotransferase

Product Information

Species	Archaeal
Source	Recombinant E. coli
Form	Liquid
EC Number	EC 2.7.1.147
CAS No.	173585-07-4
Molecular Weight	52.5 kDa
Thermal stability	Thermostable up to at least 80°C
Specificity	Glucose and glucosamine as acceptors; highly specific for ADP as phosphate donor.
Substrates	ADP; D-glucose; D-glucosamine
Reaction	ADP + D-glucose = AMP + D-glucose 6-phosphate ADP + D-glucosamine = AMP + D-glucosamine 6-phosphate
Notes	Recombinant protein produced in E. coli and purified by heat treatment and His-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