Creative Enzymes®

Native Hexokinase (ADP-Dependent) from Thermococcus litoralis

Cat. No. NATE-1136

Lot. No. (See product label)

Introduction

Description	In enzymology, a ADP-Dependent Hexokinase (EC 2.7.1.147) is an enzyme that catalyzes the chemical reaction: D–Glucose + ADP → D–Glucose–6–phosphate + AMP.
Applications	Useful for the enzymatic determination of 1,5 Anhydroglucitol.
Synonyms	ADP-dependent glucokinase; ADP-specific glucokinase; ADP:D-glucose 6-phosphotransferase; EC 2.7.1.147

Product Information

Source	Thermococcus litoralis
Appearance	White amorphous powder, lyophilized
EC Number	EC 2.7.1.147
CAS No.	173585-07-4
Molecular Weight	50 kDa (gel filtration) 50 kDa (SDS–PAGE)
Activity	More than 25 U/mg solid
Contaminants	NADPH oxidase < 0.01%; ATPase < 0.01%
Isoelectric point	4.1
pH Stability	6.5–10.5
Optimum pH	7–7.5
Thermal stability	Stable at 95°C and below
Optimum temperature	100°C
Michaelis Constant	Glucose 0.4 mM (at 37°C) ADP 0.057 mM (at 37°C)
Activators	Mg2+
Unit Definition	One unit is defined as the amount of enzyme which converts 1 µmole of D–glucose to D–Glucose–6–phosphate per minute at 37°C under the conditions specified in the assay procedure.

Storage and Shipping Information

Storage	Storage at −20°C in the presence of a desiccant is recommended.