

Native Hexokinase (ADP-Dependent) from Pyrococcus furiosus

Cat. No. NATE-1135

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 ADP.
Synonyms	ADP-dependent glucokinase; ADP-specific glucokinase; ADP:D-glucose 6-phosphotransferase; EC 2.7.1.147

Product Information

Source	Pyrococcus furiosus
Appearance	White amorphous powder, lyophilized
EC Number	EC 2.7.1.147
CAS No.	173585-07-4
Molecular Weight	100 kDa (gel filtration) 51 kDa (SDS-PAGE)
Activity	More than 30 U/mg solid
Contaminants	NADPH oxidase < 0.01%; ATPase < 0.01%
Isoelectric point	5.1
pH Stability	5.0–10.0
Optimum pH	7.5
Thermal stability	Stable at 95°C and below
Optimum temperature	100°C
Michaelis Constant	Glucose 0.64 mM (at 37°C) ADP 0.07 mM (at 37°C)
Activators	Mg ²⁺ , Co ²⁺ , Mn ²⁺
Unit Definition	One unit is defined as the amount of enzyme which converts 1 μmole of 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.
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