

## 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<sup>2+</sup>, Co<sup>2+</sup>, Mn<sup>2+</sup>

#### 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.