

Native *Saccharomyces cerevisiae* Hexokinase

Cat. No. NATE-0342

Lot. No. (See product label)

Introduction

Description

Native *Saccharomyces cerevisiae* Hexokinase for research on glucose metabolism and enzymatic mechanisms. Ideal for biochemistry and molecular biology studies. Creative Enzymes ensures reliable products.

Synonyms

hexokinase type IV glucokinase; hexokinase D; hexokinase type IV; hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; hexokinase; ATP:D-hexose 6-phosphotransferase; EC 2.7.1.1; 9001-51-8

Product Information

Source

Saccharomyces cerevisiae

Form

Type I, Lyophilized powder containing phosphate/Citrate pH approx. 7.0; Type II, Type III, Lyophilized powder containing approx. 15% sodium Citrate.

EC Number

EC 2.7.1.1

CAS No.

9001-51-8

Molecular Weight

~ 54 kDa (monomer); ~110 kDa (dimer)

Activity

Type I, > 350 units/mg protein; Type II, > 25 units/mg protein (biuret); Type III, > 130 units/mg protein (biuret).

Optimum pH

7.5 to 9.0

Activators

Hexokinase requires Mg²⁺ ions (KM = 2.6 mM) for activity. Hexokinase is activated by catecholamines and related compounds.

Inhibitors

sorbose-1-phosphate, polyphosphates, 6-deoxy-6-fluoroglucose, 2-C-hydroxy-methylglucose, xylose, lyxose, and thiol reactive compounds (Hg²⁺ and 4-chloromercuribenzoate)

Function

ATP binding; catalytic activity; hexokinase activity; ATP binding; catalytic activity; hexokinase activity

Unit Definition

One unit will phosphorylate 1.0 µmole of D-glucose per min at pH 7.6 at 25°C, unless otherwise indicated below.

Storage and Shipping Information

Storage

-20°C