Creative Enzymes®

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 Mg^{2+} 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 (Hg^{2+} 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