Creative Enzymes®

Native Bacillus sp. Hexokinase

Cat. No. NATE-1157

Lot. No. (See product label)

Introduction

Description	Native Bacillus sp. Hexokinase for research on glucose phosphorylation and enzymatic mechanisms. Ideal for microbiology and biochemistry studies. Creative Enzymes provides high-purity, reliable products.
Applications	This enzyme is useful for enzymatic determination of glucose or creatinine kinase activity when coupled with glucose–6–phosphate dehydrogenase.
Synonyms	hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; hexokinase; ATP:D-hexose 6-phosphotransferase; EC 2.7.1.1

Product Information

Source	Bacillus sp.
Appearance	White amorphous powder, lyophilized
Form	Freeze dried powder
EC Number	EC 2.7.1.1
CAS No.	9001-51-8
Molecular Weight	68 kDa (gel filtration)
Activity	More than 250 U/mg solid
Contaminants	NADH oxidase < 0.001%; ATPase < 0.002%; Myokinase < 0.002%; Creatine phosphate < 0.002%; 6-phosphgluconate dehydrogenase < 0.002%; Glucose dehydrogenase < 0 .002%
Isoelectric point	5.64
pH Stability	7.0–8.5
Optimum pH	7.5–8.0
Thermal stability	Stable at 55°C and below
Optimum temperature	50°C
Michaelis Constant	Glucose 8.2 × 10-4M ATP 8.7 × 10-5M MgCl2 1.6 × 10-3M
Stabilizers	ATP, albumin, KCl, NaCl
Unit Definition	One unit is defined as the amount of enzyme which generates 1 μmole of NADPH per minute at 37ºC 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.