

## Native Bacillus sp. Hexokinase

Cat. No. NATE-1157

Lot. No. (See product label)

### Introduction

<b>Description</b>	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.
<b>Applications</b>	This enzyme is useful for enzymatic determination of glucose or creatinine kinase activity when coupled with glucose-6-phosphate dehydrogenase.
<b>Synonyms</b>	hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; hexokinase; ATP:D-hexose 6-phosphotransferase; EC 2.7.1.1

### Product Information

<b>Source</b>	Bacillus sp.
<b>Appearance</b>	White amorphous powder, lyophilized
<b>Form</b>	Freeze dried powder
<b>EC Number</b>	EC 2.7.1.1
<b>CAS No.</b>	9001-51-8
<b>Molecular Weight</b>	68 kDa (gel filtration)
<b>Activity</b>	More than 250 U/mg solid
<b>Contaminants</b>	NADH oxidase < 0.001%; ATPase < 0.002%; Myokinase < 0.002%; Creatine phosphate < 0.002%; 6-phosphogluconate dehydrogenase < 0.002%; Glucose dehydrogenase < 0.002%
<b>Isoelectric point</b>	5.64
<b>pH Stability</b>	7.0–8.5
<b>Optimum pH</b>	7.5–8.0
<b>Thermal stability</b>	Stable at 55°C and below
<b>Optimum temperature</b>	50°C
<b>Michaelis Constant</b>	Glucose $8.2 \times 10^{-4}$ M ATP $8.7 \times 10^{-5}$ M MgCl <sub>2</sub> $1.6 \times 10^{-3}$ M
<b>Stabilizers</b>	ATP, albumin, KCl, NaCl
<b>Unit Definition</b>	One unit is defined as the amount of enzyme which generates 1 $\mu$ mole of NADPH 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.