Creative Enzymes®

# Native Microorganism Hexokinase

*Cat. No. DIA-202*

*Lot. No.* (See product label)

## Introduction

| | |
|---|---|
| ***Description*** | Native Microorganism Hexokinase for research on glucose metabolism and enzymatic mechanisms. Ideal for microbiology and biochemistry studies. Creative Enzymes provides high-quality, trusted products. |
| ***Applications*** | The enzyme is useful for enzymatic determination of glucose, adenosine-5'-triphosphate (ATP) and creatine phosphokinase when coupled with glucose-6-phosphate dehydrogenase. |
| ***Synonyms*** | Hexokinase; EC 2.7.1.1; hexokinase type IV glucokinase; hexokinase D; hexokinase type IV; hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; ATP: D-hexose 6-phosphotransferase |

## Product Information

| | |
|---|---|
| ***Source*** | Microorganism |
| ***Appearance*** | White amorphous powder, lyophilized |
| ***EC Number*** | EC 2.7.1.1 |
| ***CAS No.*** | 9001-51-8 |
| ***Molecular Weight*** | approx. 82 kDa (by gel filtration) |
| ***Activity*** | GradeⅢ 150U/mg-solid or more |
| ***Contaminants*** | Phosphoglucose isomerase < $1.0\times10^{-1}$% 6-Phosphogluconate dehydrogenase < $1.0\times10^{-2}$% Glucose-6-phosphate dehydrogenase < $1.0\times10^{-2}$% Myokinase < $1.0\times10^{-2}$% Glutathione reductase < $5.0\times10^{-1}$% |
| ***Isoelectric point*** | 4.1±0.1 |
| ***pH Stability*** | pH 4.0-9.0 (25°C, 20hr) |
| ***Optimum pH*** | 8.0-9.0 |
| ***Thermal stability*** | below 45°C (pH 7.0, 30min) |
| ***Optimum temperature*** | 50°C |
| ***Michaelis Constant*** | $2.3\times10^{-4}$M (D-Glucose), $7.7\times10^{-5}$M (ATP) |
| ***Inhibitors*** | Metal ions, p-chloromercuribenzoate, iodoacetamide, SDS, etc |

## Storage and Shipping Information

| | |
|---|---|
| ***Stability*** | Store at-20° |