

## Hexokinase from Yeast, chemically modified

Cat. No. NATE-0989

Lot. No. (See product label)

### Introduction

- Description** Chemically Modified Yeast Hexokinase for research on glucose metabolism and enzymatic activity. Perfect for biochemistry and molecular biology studies. Creative Enzymes ensures high-quality solutions.
- Applications** Use Hexokinase in diagnostic tests for blood glucose using the hexokinase method and for the determination of creatine kinase.
- Synonyms** hexokinase type IV glucokinase; hexokinase D; hexokinase type IV; hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; hexokinase; ATP:D-hexose 6-phosphotransferase

### Product Information

- Source** Yeast
- Appearance** White lyophilizate
- Molecular Weight** 57 kD (SDS-PAGE)
- Activity** > 40 U/mg lyophilizate
- Contaminants** Alcohol dehydrogenase: <0.001 ATPase: <0.05 Creatine kinase: <0.001 G6P-DH: <0.005 Glutamate dehydrogenase: <0.05 Glutathione reductase: <0.005 Myokinase: <0.001 "NADH oxidase": <0.001 6-Phosphogluconate dehydrogenase: <0.001 Phosphogluconate isomerase: <0.002 Phosphoglucomutase: <0.02 Glucose: <0.3 µg/mg lyophilizate
- Isoelectric point** 4.5-5.0
- pH Stability** 5.0-9.0
- Optimum pH** 7.0-10.0
- Michaelis Constant** Phosphate buffer, 0.1 mol/l, pH 7.0; +25°C:  $3.05 \times 10^{-4}$  mol/l Phosphate buffer, 0.1 mol/l, pH 7.4; +30°C:  $1.90 \times 10^{-4}$  mol/l Tea buffer, 0.1 mol/l, pH 7.6; +25°C:  $2.30 \times 10^{-4}$  mol/l
- Specificity** Hexokinase phosphorylates D-glucose, D-fructose, D-mannose, D-glucosamin, 2-deoxyglucose. L-Arabinose, D-xylose, L-rhamnose, D-galactose, D-lactose, sucrose, maltose, trehalose, raffinose, N-acetyl glucosamine do not react. ATP can be partially replaced by other nucleotides.
- Activators** Mg<sup>2+</sup>, catecholamines
- Inhibitors** EDTA, SH-blocking compounds, sorbose-1-phosphate, polyphosphates, 6-deoxy-6-fluoroglucose, 2-C-hydroxymethylglucose, lyxose.

### Storage and Shipping Information

- Stability** At +2 to +8°C within specification range for 18 months. Store dry.