Creative Enzymes®

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 Phophoglucose 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 x 10-4 mol/l Phosphate buffer, 0.1 mol/l, pH 7.4; +30°C: 1.90 x 10-4 mol/l Tea buffer, 0.1 mol/l, pH 7.6; +25°C: 2.30 x 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	Mg2+, 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.