

## Glucokinase from Escherichia coli, Recombinant

Cat. No. NATE-1571

Lot. No. (See product label)

### Introduction

#### Description

Glucokinase (EC 2.7.1.2) is an enzyme that facilitates phosphorylation of glucose to glucose-6-phosphate. Glucokinase occurs in cells in the liver, pancreas, gut, and brain of humans and most other vertebrates. In each of these organs it plays an important role in the regulation of carbohydrate metabolism by acting as a glucose sensor, triggering shifts in metabolism or cell function in response to rising or falling levels of glucose, such as occur after a meal or when fasting. Mutations of the gene for this enzyme can cause unusual forms of diabetes or hypoglycemia.

#### Synonyms

EC 2.7.1.2; glucokinase; glucokinase (phosphorylating); 9001-36-9; GCK; FGQTL3; GK; GLK; HHF3; HK4; HKIV; HXKP; LGLK; MODY2

### Product Information

<b>Species</b>	Escherichia coli
<b>Source</b>	E. coli
<b>Form</b>	3.2 M ammonium sulphate
<b>EC Number</b>	EC 2.7.1.2
<b>CAS No.</b>	9001-36-9
<b>Molecular Weight</b>	35 kDa
<b>Purity</b>	>95% as judged by SDS-PAGE
<b>Activity</b>	5.8 U/mg protein, 98.6 U/ml.
<b>Optimum pH</b>	7.5
<b>Optimum temperature</b>	25 °C
<b>Specificity</b>	Glucose

### Storage and Shipping Information

<b>Storage</b>	Glucokinase should be stored at 4 °C, remaining stable up to 3 years under these storage conditions.
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