Creative Enzymes®

Native Bacillus stearothermophilus Glucokinase

Cat. No. NATE-0282

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

Source	Bacillus stearothermophilus
Form	Lyophilized powder containing Tris buffer salts
EC Number	EC 2.7.1.2
CAS No.	9001-36-9
Activity	> 300 units/mg protein
Unit Definition	One unit will phosphorylate 1.0 μmole of D-glucose to D-glucose 6-phosphate per min at pH 9.0 at 30°C.

Storage and Shipping Information

Storage	−20°C