Creative Enzymes®

Native Bacillus stearothermophilus Fructose-6-phosphate Kinase

Cat. No. NATE-0252

Lot. No. (See product label)

Introduction

Description Fructose-1,6-bisphosphatase (FBP) is an important enzyme in glucose metabolism. It catalyzes the hydrolysis of fructose-1,6-bisphosphate to fructose-6-phosphate and inorganic phosphate. Fructose-6-phosphate kinase converts fructose-6-phosphate into fructose 1,6-bisphophate in the rate limiting step of the glycolysis cycle.

Applications Fructose-6-phosphate Kinase from Bacillus stearothermophilus was shown to interact with neuronal nitric oxide synthase (nNOS) causing a defect in glycolytic metabolism and increased fatigability in dystrophic muscle.

Synonyms EC 2.7.1.11; phosphohexokinase; phosphofructokinase I; phosphofructokinase (phosphorylating); 6-phosphofructose 1-kinase; ATP-dependent phosphofructokinase; D-fructose-6-phosphate 1-phosphotransferase; fructose 6-phosphate kinase; fructose 6-phosphokinase; nucleotide triphosphate-dependent phosphofructokinase; phospho-1,6-fructokinase; PFK; 9001-80-3

Product Information

Source Bacillus stearothermophilus

Form Lyophilized powder containing phosphate buffer salt

EC Number EC 2.7.1.11

CAS No. 9001-80-3

Activity > 50 units/mg protein

Unit Definition One unit will convert 1.0 µmole of fructose 6-phosphate and ATP to fructose 1,6-diphosphate and ADP per minute at pH 9.0 at 30°C.

Storage and Shipping Information

Storage −20°C