Creative Enzymes®

Native Flavobacterium meningosepticum Glycerol kinase

Cat. No. NATE-1155

Lot. No. (See product label)

Introduction

Description	The activity of glycerol kinase is found widely in nature. In microorganisms GK makes possible the utilization of glycerol as a carbon source. In mammals the enzyme represents a juncture of sugar and fat metabolism; The enzyme is important to the clinical chemist in the determination of glycerol. GK is also useful in the assay of glyceraldehydes and dihydroxyacetone following their quantitative reduction to glycerol with sodium borohydride.
Applications	Useful for the measurement of Triglyceride.
Synonyms	glycerokinase; GK; ATP: glycerol-3-phosphotransferase; glycerol kinase phosphorylating; glyceric kinase; EC 2.7.1.30

Product Information

Source	Flavobacterium meningosepticum
Appearance	White to light grayish white amorphous powder, lyophilized.
Form	Freeze dried powder
EC Number	EC 2.7.1.30
Molecular Weight	150 kDa (TSK G3000SWXL) 50 kDa (SDS–PAGE)
Activity	More than 70 U/mg solid
Contaminants	Hexokinase < 0.05%; Catalase < 0.1%; ATPase < 0.01%; Myokinase < 0.05%
Isoelectric point	4.3
pH Stability	5.0–11.0
Optimum pH	8
Thermal stability	Stable at 60°C and below
Optimum temperature	80°C
Michaelis Constant	Glycerol 8.8 × 10-5M ATP 3.0 × 10-5M
Unit Definition	One unit is defined as the amount of enzyme which converts 1 µmole of glycerol to glycerol–3–phosphate per minute at 37°C under the conditions specified in the assay procedure.

Storage and Shipping Information

Storage	Storage at -20°C in the presence of a desiccant is recommended.