Creative Enzymes®

Native E. coli Inorganic Pyrophosphatase

Cat. No. NATE-1272

Lot. No. (See product label)

Introduction

Description	Pyrophosphatase (or inorganic pyrophosphatase) is an enzyme (EC 3.6.1.1) that catalyzes the conversion of one molecule of pyrophosphate to two phosphate ions. This is a highly exergonic reaction, and therefore can be coupled to unfavorable biochemical transformations in order to drive these transformations to completion. The functionality of this enzyme plays a critical role in lipid metabolism (including lipid synthesis and degradation), calcium absorption and bone formation, and DNA synthesis,as well as other biochemical transformations.
Applications	Increasing RNA yield in transcription reaction; enhancing DNA replication.
Synonyms	Pyrophosphate phosphohydrolase; inorganic pyrophosphatase; EC 3.6.1.1; 9024-82-2; iphosphate phosphohydrolase

Product Information

Source	E. coli
Form	20 mM Tris-HCl, 100 mM NaCl, 1 mM Dithiothreitol, 0.1 mM EDTA, 50% Glycerol, pH 8.0 25°C. Store at –20°C.
CAS No.	9024-82-2
Concentration	100 units/ml
Unit Definition	One unit is the amount of enzyme that will generate 1 µmol of phosphate per minute from inorganic pyrophosphate under standard reaction conditions (a 10 minute reaction at 25°C in 20 mM Tris-HCl, pH 8.0, 2 mM MgCl2 and 2 mM PPi).