Creative Enzymes®

Native Bacillus stearothermophilus Inorganic Pyrophosphatase

Cat. No. NATE-0353

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	Inorganic pyrophosphatase (PPase) is a ubiquitous enzyme catalyzing the reaction PPi + H2O → 2Pi. It plays an important role in protein, RNA, and DNA synthesis.
Synonyms	Pyrophosphate phosphohydrolase; inorganic pyrophosphatase; EC 3.6.1.1; 9024-82-2; iphosphate phosphohydrolase

Product Information

Source	Bacillus stearothermophilus
Form	lyophilized powder
EC Number	EC 3.6.1.1
CAS No.	9024-82-2
Activity	15-25 units/mg protein (biuret)
Unit Definition	One unit will liberate 1.0 µmole of inorganic orthophosphate per min at pH 9.0 at 50°C.

Storage and Shipping Information

Storage	2-8°C