

Inorganic Pyrophosphatase from *Saccharomyces cerevisiae*, Recombinant

Cat. No. NATE-1281

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

Enhancing yields of RNA in transcription reactions

Synonyms

Pyrophosphate phosphohydrolase; inorganic pyrophosphatase; EC 3.6.1.1; 9024-82-2; iphosphate phosphohydrolase

Product Information

Species

Saccharomyces cerevisiae

Source

E. coli

Form

20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.1 mM EDTA, 1 mM dithiothreitol and 50% glycerol.

CAS No.

9024-82-2

Molecular Weight

71 kDa

Concentration

100 units/ml

Unit Definition

One unit is the amount of enzyme that will generate 1 μ mol of phosphate per minute from inorganic pyrophosphate under standard reaction conditions (a 10 minute reaction at 25°C in 100 mM Tris-HCl, [pH 7.2], 2 mM MgCl₂ and 2 mM PPi in a reaction volume of 0.5 ml).

Storage and Shipping Information

Storage

at -20°C