

## Polynucleotide phosphorylase from *Synechocystis* sp., Recombinant

Cat. No. NATE-0610

Lot. No. (See product label)

### Introduction

#### Description

Polynucleotide phosphorylase (PNPase) is a bifunctional enzyme with a phosphorolytic 3' to 5' exoribonuclease activity and a 3'-terminal oligonucleotide polymerase activity. It is also involved in mRNA processing and degradation in bacteria, plants, and humans.

#### Applications

Polynucleotide phosphorylase has been used in a study to discover that a major function of PNPase is the synthesis of CDP. It has also been used in a study to investigate the enzyme responsible for RNA 3'-tail synthesis in *S. coelicolor*.

#### Synonyms

PNPase; nucleoside diphosphate:polynucleotidyl transferase; polyribonucleotide nucleotidyltransferase; polynucleotide phosphorylase; polyribonucleotide phosphorylase; EC 2.7.7.8; 9014-12-4

### Product Information

#### Species

*Synechocystis* sp.

#### Source

*E. coli*

#### EC Number

EC 2.7.7.8

#### CAS No.

9014-12-4

#### Unit Definition

One unit will polymerize 1.0  $\mu$ mole of ADP, releasing 1.0  $\mu$ mole of inorganic phosphate in 15 minutes, at pH 9.1 at 37°C. Supplied as a solution in 20 mM Hepes buffer pH 7.9, 0.1 mM EDTA, 2 mM DTT, 12.5 mM MgCl<sub>2</sub>, 60 mM KCl, 20% (w/v) Glycerol

### Storage and Shipping Information

#### Storage

-70°C