Creative Enzymes®

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 μmole of ADP, releasing 1.0 μmole 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 MgCl2, 60 mM KCl, 20% (w/v) Glycerol

Storage and Shipping Information

Storage	−70°C