

Active Recombinant Bacteriophage T4 Polynucleotide Kinase

Cat. No. pseT-58B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified from a strain of <i>E. coli</i> that expresses the recombinant T4 Polynucleotide Kinase gene.
Species	Bacteriophage T4
Source	<i>E. coli</i>
Description	T4 Polynucleotide Kinase (PNK) catalyzes the transfer and exchange of the terminal gamma position phosphate of ATP to the 5'-hydroxyl terminus of double- and single-stranded DNA, RNA and nucleoside 3'-monophosphate molecules. T4 PNK also exhibits 3'-phosphatase and 2', 3' cyclic phosphodiesterase activities.
Bio-activity	133,333 U/mg
Molecular Mass	34,620 Daltons
Purity	>99% by SDS-PAGE
Unit Definition	1 unit is defined as the amount of enzyme catalyzing the incorporation of 1 nmol of [32P] (ATP donor) in 30 minutes at 37°C in 1X T4 Polynucleotide Kinase Reaction Buffer.
Storage	-25 to -15°C
Concentration	10,000 U/m

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage Buffer

Supplied in: 10mM Tris-HCL, 50 mM KCl, 0.1 μ M ATP, 1mM DTT, 0.1mM EDTA, 50% glycerol pH 7.4 @ 25°C. Supplied with: 10X T4 Polynucleotide Kinase Buffer: 700mM Tris-HCl, 100mM MgCl₂, 50mM DTT pH 7.6 @ 25°C.

GENE INFORMATION
Gene Name

pseT polynucleotide kinase [Enterobacteria phage T4]

Official Symbol

pseT

Synonyms

pseT; polynucleotide kinase; NP_049834.1; 5'-hydroxyl kinase, a 3'-phosphatase and a 2',3'-cyclic phosphodiesterase; catalyzes the transfer of the terminal phosphate of ATP to the 5'-hydroxyl termini of ribo- and deoxyribonucleotides; in the presence of ADP the enzyme also catalyzes the exchange of the 5' terminal phosphate from phosphorylated DNA to ADP; these activities modify the ends of nicked tRNA generated by a bacterial response to infection and facilitate repair by T4 RNA ligase

Gene ID

1258796

Protein Refseq

NP_049834

UniProt ID

2IA5_D

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA