



For research use only

ISO9001

T4 Polynucleotide Kinase

Product	Quantity	Cat. No.	Remarks
T4 Polynucleotide Kinase	500 unit	EBT-3031	10 unit/ μ l

Description

T4 Polynucleotide Kinase catalyzes the transfer of the γ -phosphate from ATP to the 5'-terminus of polynucleotides or to mononucleotides bearing a 5'-hydroxyl group. The enzyme can be used to phosphorylate RNA, DNA and synthetic oligonucleotides. T4 Polynucleotide Kinase is purified from recombinant *E. coli*.

Concentration & Storage Condition

10 unit/ μ l. Store at -20°C.

Storage Buffer

20 mM Tris-HCl, pH 7.5, 25 mM KCl, 2 mM DTT, 0.1 mM EDTA, 0.1 μ M ATP and 50% glycerol.

10x Reaction Buffer

700 mM Tris-HCl, pH 7.6, 100 mM MgCl₂, 50 mM DTT.

Unit Definition

One unit is defined as the amount of enzyme required to catalyze the transfer of 1 nmole of phosphate to the 5'-OH end of a polynucleotide from [γ -³²P]ATP in 30 min at 37°C. The reaction conditions are: 40 mM Tris-HCl, pH 7.5, 10 mM MgCl₂, 5 mM DTT, 0.1 mM [γ -³²P]ATP and 0.5 mM 5'-OH polynucleotide end concentration.

QC Tests

Activity, exo and endonuclease activity test, SDS-PAGE purity, performance tests.



For research use only

ISO9001

T4 Polynucleotide Kinase

Product	Quantity	Cat. No.	Remarks
T4 Polynucleotide Kinase	500 unit	EBT-3031	10 unit/ μ l

Description

T4 Polynucleotide Kinase catalyzes the transfer of the γ -phosphate from ATP to the 5'-terminus of polynucleotides or to mononucleotides bearing a 5'-hydroxyl group. The enzyme can be used to phosphorylate RNA, DNA and synthetic oligonucleotides. T4 Polynucleotide Kinase is purified from recombinant *E. coli*.

Concentration & Storage Condition

10 unit/ μ l. Store at -20°C.

Storage Buffer

20 mM Tris-HCl, pH 7.5, 25 mM KCl, 2 mM DTT, 0.1 mM EDTA, 0.1 μ M ATP and 50% glycerol.

10x Reaction Buffer

700 mM Tris-HCl, pH 7.6, 100 mM MgCl₂, 50 mM DTT.

Unit Definition

One unit is defined as the amount of enzyme required to catalyze the transfer of 1 nmole of phosphate to the 5'-OH end of a polynucleotide from [γ -³²P]ATP in 30 min at 37°C. The reaction conditions are: 40 mM Tris-HCl, pH 7.5, 10 mM MgCl₂, 5 mM DTT, 0.1 mM [γ -³²P]ATP and 0.5 mM 5'-OH polynucleotide end concentration.

QC Tests

Activity, exo and endonuclease activity test, SDS-PAGE purity, performance tests.