



For research use only

ISO9001

T7 RNA Polymerase

Product	Quantity	Cat. No.	Remarks
T7 RNA Polymerase	10,000 unit	EBT-3001	100 unit/ μ l

Description

T7 RNA Polymerase is a DNA-dependent RNA polymerase that exhibits extremely high specificity for its cognate promoter sequences. Only T7 DNA or DNA cloned downstream from a T7 promoter can serve as a template for T7 RNA Polymerase-directed RNA synthesis. T7 RNA Polymerase is purified from a recombinant *E. coli* strain.

Concentration & Storage Condition

100 unit/ μ l. Store at -20°C.

Storage Buffer

20 mM potassium phosphate, pH 7.7, 1 mM EDTA, 10 mM DTT, 100 mM NaCl, 0.1% (v/v) Triton X-100, 50% (v/v) glycerol.

5x Reaction Buffer

200 mM Tris-HCl, pH 7.9, 30 mM MgCl₂, 10 mM spermidine, 50 mM NaCl.

Unit Definition

One unit is defined as the amount of enzyme required to catalyze the incorporation of 5 nmol of CTP into acid-insoluble product in 60 min at 37°C in a total volume of 100 μ l. The reaction conditions are: 40 mM Tris-HCl, pH 7.9, 6 mM MgCl₂, 10 mM DTT, 10 mM NaCl₂, 2 mM spermidine, 0.05% Tween-20, 0.5 mM each of ATP, GTP, CTP, and UTP, 0.5 μ Ci [³H]CTP and 2 μ g supercoiled vector DNA with T7 promoter.

QC Tests

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



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