

Thermo T7 RNA Polymerase << TT7 >>

Code No. TRL-2

Lot No. *****

Storage Store at -20°C

Size 7,500units(201),50,000 units(252)

Components	:	• Thermo T7 RNA Polymerase • 10x Reaction Buffer for Thermo T7 RNA Polymerase
Concentration	:	Thermo T7 RNA Polymerase <u> * * * </u> units/μl
Source	:	<i>Escherichia coli</i> carrying the plasmid that encodes the gene of phage T7 RNA polymerase.
Unit Definition	:	One unit of enzyme is defined as the amount of enzyme that will incorporate 1 nmole of labeled nucleotide into acid insoluble material in 1 hour at 37°C under standard assay conditions as described below.
Assay Condition	:	40mM Tris-HCl(pH8.0), 50mM NaCl, 8mM MgCl ₂ , 5mM DTT, 400μM rNTPs, 400μM [³ H]-UTP(30cpm/pmoles), 20μg/ml T7 DNA, 50μg/ml BSA, 100μl reaction volume. 37°C, 10min.
Storage buffer	:	20 mM Potassium phosphate(pH7.7) 100 mM NaCl 5 mM DTT 0.1 mM EDTA 0.01 % Triton X-100 50 %(v/v) Glycerol
10x Reaction Buffer	:	400 mM Tris-HCl(pH8.0) 500 mM NaCl 80 mM MgCl ₂ 50 mM DTT
Quality Control Assays	:	This product has passed the following quality control assays: 1. SDS-polyacrylamide gel analysis for purity 2. Functional absence of exonuclease, endonuclease, and RNase 3. Performance in a transcription reaction at both 37°C and 50°C
Application Examples	:	10x Reaction Buffer 5μl ATP, CTP, GTP, UTP each 0.4mM RNase inhibitor 20 units Template DNA 100~1000ng Thermo T7 RNA Polymerase 25~100units dH ₂ O / total 50μl→incubate at 37~50°C for 30~60min