

## Thermo T7 RNA Polymerase

&lt;&lt; TT7 &gt;&gt;

Code No. TRL-252

Lot No. \*\*\*\*\*

Size 50,000 units

Components	:	• Thermo T7 RNA Polymerase • 10× Reaction Buffer for Thermo T7 RNA Polymerase
Concentration	:	Thermo T7 RNA Polymerase                      1,000            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 <sub>2</sub> , 5mM DTT, 400μM rNTPs, 400μM [ <sup>3</sup> H]-UTP(30cpm/pmoles), 20μg/mL T7 DNA, 50μg/mL BSA, 50μL 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
10× Reaction Buffer	:	400 mM          Tris-HCl(pH8.0) 500 mM          NaCl 80 mM            MgCl <sub>2</sub> 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	:	10× 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 <sub>2</sub> O    / total 50μL → incubate at 37~50°C for 30~60min

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information

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