

T7 RNA POLYMERASE

T7 RNA polymerase는 bacteriophage T7 RNA polymerase gene을 Escherichia coli로부터 발현시킨 후 정제 과정을 거친 제품입니다. T7 phage promoter에 특이적으로 결합하고, T7 promoter 아래에 cloned DNA sequence로부터 시험관 내 RNA의 합성을 촉매하는 제품입니다.





Components

	E-3043 (100 rxn)	E-3044 (500 rxn)
T7 RNA Polymerase (50 U/µI)	5,000 U (100 µl)	25,000 U (100 µl X 5)
5X Reaction buffer	1 ml	1 ml X 5
RNase inhibitor (100 ng/µl)	0.1 ml	0.1 ml X 5
100 mM DTT	0.2 ml	0.2 ml X 5

^{*} Note: For research use only. Not for use in diagnostic or therapeutic procedures.

Application

- · Synthesis of highly radiolabeled RNA probes
- · Synthesis of siRNA precursors
- · Synthesis of precursors for RNA splicing reactions
- · Synthesis of mRNA for *in vitro* translation
- · Synthesis of sgRNA for CRISPR-Cas9 based gene editing
- · RNA structure, processing and catalysis studies
- · Production of RNA Vaccines
- · Expression control via anti-sense RNA

Ordering Information

Product Description		Cat. No.
T7 RNA Polymerase	5,000 U (100 rxn)	E- 3043
	25,000 U (500 rxn)	E-3044
Related Products		Cat. No.
mRNA Synthesis Service		gene-synthesis-mrna-custom order
<i>AllnOneCycler™</i> PCR System		A-2041
DUALED Blue/White Transilluminator		A-6020

Quality Assurance

- \cdot Nuclease Contamination Assay: Nuclease activity is not detected after incubation of 1 μ g of substrate Lambda DNA or RNA with 50 ng of T7 RNA Polymerase at 37°C for 18 hr.
- · Protease Contamination Assay: Protease activity is not detected after incubation of Protease K with 2 µg of T7 RNA Polymerase at 37°C for 18 hr.
- · Physical Purity: The purity is ≥ 95% as determined by SDS-polyacrylamide gels.

