

Efficiently synthesize your mRNA

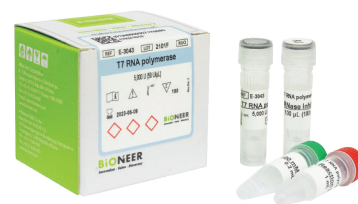
Speed up your vaccine development

T7 RNA POLYMERASE

- ✓ High yield mRNA Synthesis
- ✓ ISO 9001 Quality management system
- ✓ From credible expertises
- ✓ Mass production upon request

T7 RNA POLYMERASE

T7 RNA Polymerase is a DNA-dependent RNA polymerase which initiates transcription highly specific on the T7 promoter. It is widely used for the rapid synthesis of specific RNAs in *in vitro*.



Components

| | E-3043 (100 rxn) | E-3044 (500 rxn) |
|-----------------------------|------------------|-----------------------|
| T7 RNA Polymerase (50 U/μl) | 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 |
| AllInOneCycler™ PCR System | | A-2041 |
| DUALED Blue/White Transilluminator | | A-6020 |

Quality Assurance

- Nuclease Contamination Assay: Nuclease activity is not detected after incubation of 1 μg 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.