

DATA SHEET

Version:
Revision date:

1. Identification

Product name	T7 RNA Polymerase (50 U/ μ L) 5000 U
Cat. No	EZ0025

2. Description

T7 RNA Polymerase is a very active recombinant enzyme produced by a strain of *Escherichia coli*. The enzyme is a DNA dependent RNA polymerase from coliphage T7. It catalyzes the synthesis of RNA in the 5' \rightarrow 3' direction only in the presence of its cognate T7 phage promoter sequence.

3. Protein information

Predicted MW	98,8 KDa
Purity	>95% as determined by SDS-polyacrylamide gels with Coomassie® blue staining
Buffer	1X Reaction Buffer: 40 mM Tris-HCl, 6 mM MgCl ₂ , 1 mM DTT, 2 mM spermidine (pH 7.9 @ 25°C)
Storage	-20°C
Biological activity	One unit is defined as the amount of enzyme that will incorporate 1 nmol ATP into acid-insoluble material in a total reaction volume of 50 μ l in 1 hour at 37°C.

4. Gene Information

Synonyms	T7RNAP
Official Symbol	T7p07
Specie	Escherichia phage T7
Protein Family	Family of single-subunit RNAPs that includes the phage RNAPs (T3, K11, SP6, N4, and others) as well as the mitochondrial RNAPs.

5. Storage specifications

Store at -20°C. Avoid exposure to constant temperature changes.

6. Applications

- Synthesis of mRNA, RNA standard template for RT-PCR, RNA probes for hybridization.
- Preparation of RNA vaccines.
- Studies of RNA secondary structure and RNA-protein interactions, RNA splicing.

7. Further information

RUO This product is developed, designed and sold exclusively only for research purposes use. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

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