

T7 RNA Polymerase

Description: T7 RNA Polymerase is a DNA dependent RNA polymerase which has high specificity for T7 promoter sequences.

The vectors carrying T7 promoter allow *in vitro* synthesis of defined RNA transcripts from a cloned DNA sequence.

Unit Definition: One unit is defined as the amount of enzyme required to incorporate 1 nanomole ATP into an acid-insoluble form in 1 hour at 37° C.

Assay Buffer: (1X) 40 mM Tris-HCl (pH 7.9), 6 mM MgCl₂, 2 mM spermidine and 10 mM DTT.

Buffer supplied at **5X** concentration.

Storage Buffer: 50 mM Tris-HCl (pH 7.9), 1 mM EDTA, 20 mM 2-Mercaptoethanol, 100 mM NaCl, 0.1% Triton X-100 and 50% Glycerol.

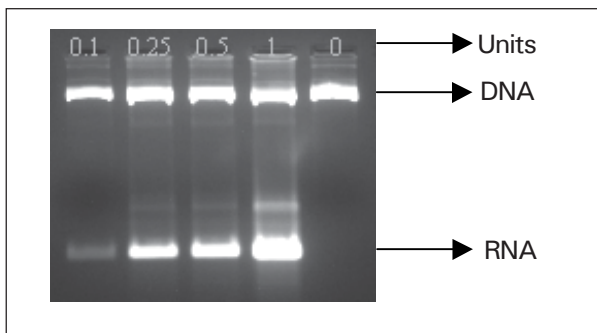
Note: DTT is required for activity and T7 RNA Polymerase is sensitive to salt concentrations. For best result, overall salt concentration should not exceed 50 mM.

Application: T7 RNA polymerase can be used to prepare radiolabelled RNA probes, RNA generation for *in vitro* translation, RNA generation for studies of RNA structure, processing and catalysis.

Performance Test:

Enzyme Tested for its performance in *in vitro* transcription assays.

Store at -20°C



In vitro Transcription: 1 µg of control template DNA incubated with 0.1, 0.25, 0.5 and 1U of T7 RNA Polymerase, under standard assay conditions for 1 hour at 37°C. The reaction mixture was then analysed on 2% agarose gel.

Ordering Information:

Product	Size	Cat #
T7 RNA Polymerase	5000 U	105927

AMV Reverse Transcriptase

For Details Refer Page No. C50

M-MuLV Reverse Transcriptase

For Details Refer Page No. C50