



For research use only

ISO9001

## Phi6 RNA Polymerase

Product	Quantity	Cat. No.	Remarks
Phi6 RNA Polymerase	100 unit	EBT-3003	1 unit/ $\mu$ l

### Description

The Phi6 RNA Polymerase is an RNA-dependent RNA polymerase (RdRp) of bacteriophage Phi6. It is a highly processive enzyme which synthesizes a full length complementary RNA strand using either single or double stranded RNA as templates. The RNA synthesis initiates from the 3' end of template RNA without primer. The recombinant enzyme is purified from *E. coli* strain that carries a P2 gene of bacteriophage Phi6.

### Applications

- Synthesis of dsRNA *in vitro*
- Synthesis of dsRNA for RNAi
- Primer independent RNA synthesis

### Reagents Supplied & Storage Condition

- Phi6 RNA Polymerase : 1 unit/ $\mu$ l, Store at -20°C.
- 10x Phi6 RNA Pol Reaction Buffer : Store at 4°C.
- 50 mM MnCl<sub>2</sub> : Store at 4°C.
- ATP, UTP, CTP, GTP are not included in the product.

### Reaction Condition

1X Phi6 RNA Pol Reaction Buffer with 1.5 mM MnCl<sub>2</sub>, 0.1-0.2 mM each ATP, UTP, CTP and 0.3-0.6 mM GTP. Incubate at 32°C.

### 10x Reaction Buffer

500 mM Tris-HCl, pH8.9, 500 mM Ammonium Acetate.

### Storage Buffer

50 mM Tris-HCl, pH8.0, 100 mM NaCl, 0.1 mM EDTA, 0.1% Triton X-100, 50% Glycerol.

### Unit Definition

One unit is defined as the amount of enzyme that will incorporate 1 nmol of UTP into an acid-insoluble material in 20 minutes at 32°C.

### QC Tests

Activity, exo and endonuclease activity test, SDS-PAGE purity, performance tests.



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