

## Certificate of Analysis

**Product Name:** Taq DNA Polymerase

**Catalog No:** L7051001 /L7051200

**Shipping and Storage Condition:** Dry Ice

**Storage Condition:** -20°C

**Shelf Life:** 1 year from the date of receipt under proper storage conditions

### Description

Taq DNA polymerase is a thermostable enzyme that possesses a non-processive 5'-3' polymerase activity and double stranded specific 5'-3' exonuclease activity in the presence of magnesium.

### Source

An E. coli strain that carries the Taq DNA Polymerase gene from *Thermus aquaticus* YTI.

### Storage Buffer

50 mM Tris pH 8.0, 100 mM NaCl, 1 mM DTT, 50% glycerol, 0.1 mM EDTA, 1% TritonX-100.

### Unit Definition

One unit is defined as the amount of enzyme required to incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 75°C.

### Reaction Buffer (10X)

100 mM Tris pH 9.0, 25 mM MgCl<sub>2</sub>, 500 mM KCl, and 1% TritonX-100.

**Concentration:** 5 units/μL

**Quality Assurance:** Free of endonucleases and exonucleases.

Reaction Condition (for a 50 μl reaction)

|                             |        |
|-----------------------------|--------|
| 10X reaction buffer         | 5 μl   |
| 10 mM dNTP                  | 4 μl   |
| DNA template (10 ng – 5 μg) | x μl   |
| Taq                         | 0.5 μl |

### Components

1. 2 X 500 units ÷ 1x200 units of Taq DNA Polymerase
2. 2x1,200 μl ÷ 1x500 μl 10X PCR buffer.
3. One of Certificate of Analysis

**FOR IN VITRO RESEARCH USE ONLY**

**APPROVED BY:** \_\_\_\_\_

