

## Taq DNA Polymerase without Mg<sup>2+</sup>

**Cat. No.** E00008**Size:** 1,000 U**Unit Definition:**

One unit is the amount of enzyme that can incorporate 10 nmol of dNTP into acid-insoluble material in 30 minutes at 74°C.

### PRODUCT INFORMATION

#### Description

Taq DNA Polymerase is a thermostable DNA Polymerase isolated from an *E. coli* strain that carries the Taq DNA polymerase gene. Taq DNA Polymerase is the most common polymerase used for PCR\* reactions.

#### 10 X reaction Buffer (without Mg<sup>2+</sup>)

500 mM KCl, 100 mM Tris HCl (pH 9.0 at 25°C), 1% Triton X-100 Buffer. This buffer is optimized for use with 200 µM dNTPs.

Note: If the reaction is performed without this buffer, then add 0.1% Triton X-100 (final concentration) to ensure high activity.

#### Storage Buffer and Concentration

Supplied in 5 units/µl in 20 mM Tris HCl (pH 8.0), 0.1 mM EDTA, 1 mM DTT, 0.1% Triton X-100 and 50% glycerol.

#### Storage

The enzyme can be shipped at room temperature or even 37°C for seven days without any loss of activity. This product can be stored at -20°C for future using.

#### Formulation

5 units/µl in 20 mM Tris HCl (pH 8.0), 0.1 mM EDTA, 1 mM DTT, 0.1% Triton X-100 and 50% glycerol.

#### Key Feature

- Terminal transferase activity. Taq DNA Polymerase has terminal transferase activity which results in the addition of a single nucleotide (adenosine) at 3' end of the extension product.
- High-purity. No contamination activity has been detected in standard test reactions.

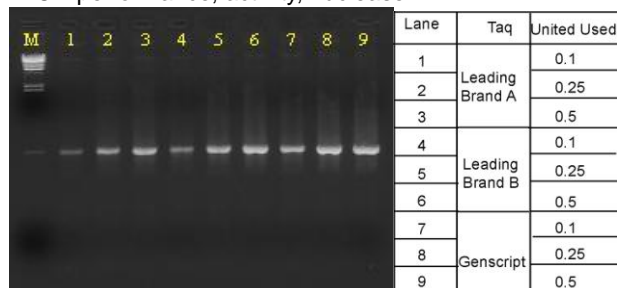
#### Applications

Taq DNA Polymerase can be used in most applications including the following:

- PCR\*
- 3' A-tailing of blunt ends
- Primer extension
- DNA sequencing

## QC Tests

PCR performance, activity, nuclease.



\* The PCR process is covered by US. Patents Nos. 4683195 and 4683202, issued to Cetus and owned by Hoffman-La Roche Inc. GenScript does not encourage or support the unauthorized use of the PCR process. Use of this product is recommended for persons who either have a license to perform PCR or are not required to obtain a license. Sale of this product is restricted to regions or countries where native *Taq* DNA polymerase patents have been invalidated.

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