

Taq DNA Polymerase

Cat. No.: E00007

PRODUCT INFORMATION

Size: 1,000 U or
500,000 U

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.

Unit Definition:

1 unit of enzyme incorporates 10 nmol of dNTP into acid-insoluble material in 30 min at 74°C.

10 X reaction Buffer (with Mg²⁺)

500 mM KCl, 100 mM Tris HCl (pH 9.0 at 25°C), 15 mM MgCl₂, 1% Triton X-100 Buffer. This buffer is optimized for use with 200 μM dNTPs.

Note: If not using this buffer, 0.1% Triton X-100 (final concentration) is a must 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

-20 °C

Formulation

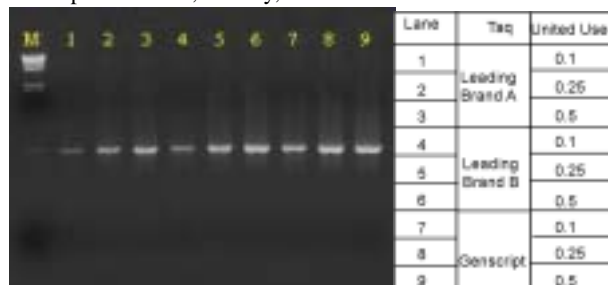
Genscript Taq DNA Polymerase has been formulated using a proprietary technology, and the enzyme can be shipped at room temperature or stand at 37°C for 7 days without losing any activity.

Features

- 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.

QC Tests

PCR performance, activity, nuclease.



Applications

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

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