

Taq DNA Polymerase without Mg²⁺

DATASHEET

Version: 201807

Cat. No.: E00008

Size: 1,000 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.

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.

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.

10 X reaction Buffer (without Mg²⁺):

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:

The enzyme is delivered 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:

This product can be stored at -20°C for future using.

Formulation:

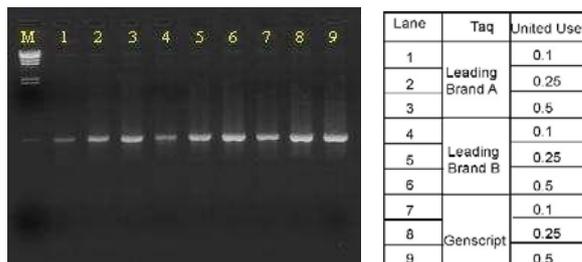
GenScript *Taq* DNA Polymerase has been formulated using GenScript's proprietary technology. The enzyme can be shipped at room temperature or even 37°C for seven days without any loss of activity.

Applications:

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

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

PCR performance, activity, nuclease.



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