tiTaq DNA Polymerase



tiTaq DNA Polymerase is a new generation "hot start" enzyme that is blocked at moderate temperatures and allows room temperature reaction setup.

Use of tiTaq DNA Polymerase allows for the increase of PCR specificity, sensitivity and yield in comparison to the conventional PCR assembly method.

Automatic "hot start" PCR is a fast and convenient method when assembling multiple PCR reactions.

Thermostable tiTaq DNA Polymerase:

- replicates DNA at 72°C and exhibits a half-life of 40 min at 95°C,
- catalyzes the polymerization of nucleotides into duplex DNA in the 5'→3' direction in the presence of magnesium ions,
- contains the 5'→3' exonuclease activity,
- lacks the 3'→5' exonuclease activity,
- adds extra A at the 3' ends.

tiTaq DNA Polymerase is recommended for use in PCR and primer extension reactions at elevated temperatures to obtain a wide range of DNA products up to 10 kb.



E2715-01

E2715-04

E2715-02

F2715-03

200 U

500 U

1000 U

5000 U



Fig. 1 PCR amplification using EURx tiTaq DNA Polymerase.

A 6.9 kb amplicon of Bacillus phage DNA was amplified with tiTaq DNA Polymerase. Reactions were incubated at 25°C for 30 minutes before amplification.

Lane M: molecular size marker - EURx Perfect Plus™ 1 kb DNA Ladder (E3131).

Lanes 1,2: PCR amplification reactions using 1.25 units of tiTaq DNA Polymerase, Pol Buffer B and 0.2 mM dNTPs in 50 μ l reaction volume.

Lane 3: PCR amplification reaction using 1.25 units of Taq DNA Polymerase (E2500), Pol Buffer B and 0.2 mM dNTPs in $50 \mu l$ reaction volume.

