

## **CERTIFICATE OF ANALYSIS**

### ***DNA free-Taq DNA Polymerase***

**Lot No.**

**Date of Analysis:**

#### **Endodeoxyribonuclease Assay**

No conversion of covalently closed circular DNA to nicked DNA was detected after incubation of 25 units of *DNA free-Taq DNA Polymerase* with 1 µg of pUC19 DNA for 4 hours at 37°C.

#### **Deoxyribonuclease Assay**

No degradation of single-stranded and double stranded [<sup>33</sup>P]-labeled oligonucleotide was observed after incubation with 10 units of *DNA free-Taq DNA Polymerase* for 4 hours at 37°C.

#### **Ribonuclease Assay**

No contaminating RNase activity was detected after incubation of 80 ng of 2 kb RNA transcript with 25 u of *DNA free-Taq DNA Polymerase* for 4 hours at 37°C.

#### ***E. coli* genomic DNA free Test**

PCR was performed with *E. coli* genomic DNA (positive control) and without *E. coli* genomic DNA (NTC, no template control) in 30 cycles in the presence of *E. coli* 16s rDNA specific primers (1.2 kb product). There weren't any visible amplification band in NTC.

#### **Functional Assay (PCR)**

*DNA free-Taq DNA Polymerase* was tested in PCR amplification of a 270 bp DNA fragment of single copy Beta globulin gene from 50 pg of human genomic DNA in a 20 µl PCR mixture containing 1X PCR Buffer, 2.5 mM MgCl<sub>2</sub>, 0.2 mM dNTP, 0.5 µM primers and 1 units of *DNA free-Taq DNA Polymerase*. The PCR products were analyzed on 1% agarose gel.

This certificate is a declaration of analysis at the time of manufacture and does not release you from performing the standard control upon receipt of incoming goods. The manufactured product satisfies with all forced criteria. The lot was released for sale.