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CERTIFICATE OF ANALYSIS

Product: Taq DNA polymerase

Catalog No: T032, T033, T034

Lot No: T032122023

Date of Expiry: 12/2023

Concentration: 5U/μl

Storage buffer: 20 mM HEPES, pH 7.9, 100 mM KCl, 0.1 mM EDTA, 1 mM DTT, 0.5 mM PMSF,

stabilizers, 50% glycerol.

Supplied with: 10 x reaction buffer with MgCl₂ - 100 mM Tris-HCl, pH 8.8 (at 25°C), 500 mM KCl, 1%

Triton X-100, 15 mM MgCl₂.

or

10 x reaction buffer without MgCl₂ - 100 mM Tris-HCl, pH 8.8 (at 25°C), 500 mM KCl,

1% Triton X-100; + 25 mM MgCl₂ in separate tube

Storage temperature: -16 to -25 °C

Purity: The enzyme was analyzed by SDS-PAGE and single band of ~94 kDa was observed

Functional Test: The Lot has been tested for the ability to amplify a fragment of genomic DNA using the

 $following\ conditions:$

Test conditions: $41.5 \mu l PCR H_2O$

 $5~\mu l~10~x~reaction~buffer~with~MgCl_2~(see~above)$

1 μl 10 mM dNTP mix (10 mM for each, dATP, dCTP, dGTP, and dTTP)

0.5 μ l 50 μ M 5' primer (5'-ATGAACCCAGCCATCAGCG-3' 0.5 μ l 50 μ M 3' primer 5'-GGGTAAGGACCTTGATATAGG-3'

0.5 μl Tag DNA polymerase 5U/ μl (2.5 U total)

1 μl DNA containing 80 ng of mouse genomic (tail) DNA.

Cycling conditions: 95°C, 2 min initial denaturation, followed by 40 cycles of

94°C, 15 s (denaturation) 54°C, 15 s (annealing) 72°C, 60 s (extension)

Result: As expected, electrophoresis of the PCR product on agarose gel revealed one band of 864 bp.

passed

FOR RESEARCH USE APPROVED DATE: 07.10.2021

Manager: Hana Těšitelová