

## CERTIFICATE OF ANALYSIS

<b>Product:</b>	Taq DNA polymerase
<b>Catalog No:</b>	T032, T033, T034
<b>Lot No:</b>	T032122025
<b>Date of Expiry:</b>	12/2025
<b>Concentration:</b>	5U/ $\mu$ l
<b>Storage buffer:</b>	20 mM HEPES, pH 7.9, 100 mM KCl, 0.1 mM EDTA, 1 mM DTT, 0.5 mM PMSF, stabilizers, 50% glycerol.
<b>Supplied with:</b>	10 x reaction buffer with MgCl <sub>2</sub> - 100 mM Tris-HCl, pH 8.8 (at 25°C), 500 mM KCl, 1% Triton X-100, 15 mM MgCl <sub>2</sub> . or 10 x reaction buffer without MgCl <sub>2</sub> - 100 mM Tris-HCl, pH 8.8 (at 25°C), 500 mM KCl, 1% Triton X-100; + 25 mM MgCl <sub>2</sub> in separate tube
<b>Storage temperature:</b>	-16 to -25 °C
<b>Purity:</b>	The enzyme was analyzed by SDS-PAGE and single band of ~94 kDa was observed
<b>Functional Test:</b>	The Lot has been tested for the ability to amplify a fragment of genomic DNA using the following conditions:
<b>Test conditions:</b>	41.5 $\mu$ l PCR H <sub>2</sub> O 5 $\mu$ l 10 x reaction buffer with MgCl <sub>2</sub> (see above) 1 $\mu$ l 10 mM dNTP mix (10 mM for each, dATP, dCTP, dGTP, and dTTP) 0.5 $\mu$ l 50 $\mu$ M 5' primer (5'-ATGAACCCAGCCATCAGCG-3') 0.5 $\mu$ l 50 $\mu$ M 3' primer 5'-GGGTAAGGACCTTGATATAGG-3' 0.5 $\mu$ l Taq DNA polymerase 5U/ $\mu$ l (2.5 U total) 1 $\mu$ l DNA containing 80 ng of mouse genomic (tail) DNA.
<b>Cycling conditions:</b>	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)
<b>Result:</b>	As expected, electrophoresis of the PCR product on agarose gel revealed one band of 864 bp. passed

FOR RESEARCH USE

APPROVED DATE: 22.01.2024

Manager: Hana Těšitelová