

CERTIFICATE OF ANALYSIS

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|-----------------------------|---|
| Product: | PPP Master Mix without MgCl ₂ |
| Catalog No: | P134, P135, P136, P136xl |
| Lot No: | P134122022 |
| Date of Expiry: | 12/2022 |
| Composition: | 2x concentrated PPP Master Mix without MgCl ₂ contains: 150 mM Tris-HCl, pH 8.8 (25°C), 40 mM (NH ₄) ₂ SO ₄ , 0.02% Tween 20, 400 μM dATP, 400 μM dCTP, 400 μM dGTP, 400 μM dTTP, 100 U/ml Taq DNA polymerase, dye, stabilizers and additives. |
| Supplied with: | PCR Ultra H ₂ O (Cat. No. P040). 25 mM MgCl ₂ (Cat. No. T030). |
| Storage temperature: | For short terms (days) at 4°C ± 3°C. For long terms at -20 ± 5°C. Material can be repeatedly defrosted. |
| Purity: | Purity of Taq DNA polymerase is verified by SDS PAGE, only one band of 94 kDa is observed in Coomassie blue stained gel. Material is free of nucleases. |
| Functional Test: | The lot has been tested for the ability to amplify a fragment of genomic DNA using the following conditions: |

Test conditions:

| Volume * | Reagent | Final concentration |
|----------|--|---|
| 12.5 μl | PPP Master Mix without MgCl ₂ | 1x PPP Master Mix without MgCl ₂ (75 mM Tris-HCl, pH 8.8 (at 25°C), 20 mM (NH ₄) ₂ SO ₄ , 0.01% Tween 20, 200 μM dATP, 200 μM dCTP, 200 μM dGTP, 200 μM dTTP, 2.5 U Taq DNA polymerase, stabilizers and additives) |
| 2.5 μl | 25 mM MgCl ₂ | 2.5 mM MgCl ₂ |
| 0.5 μl | Forward primer | 50 μM 5' primer 5'-ATGAACCCAGCCATCAGCG-3' |
| 0.5 μl | Reverse primer | 50 μM 3' primer 5'-GGGTAAGGACCTTGATATAGG-3' |
| 1 μl | Template DNA | containing 80 ng of mouse genomic DNA |
| 8 μl | PCR Ultra H ₂ O | to a final volume 25 μl |

Cycling conditions:

| | Temperature | Time | Number of cycles |
|----------------------|-------------|-------|------------------|
| Initial denaturation | 94°C | 1 min | 1 |
| Denaturation | 94°C | 15 s | 30 |
| Annealing of primers | 55°C | 15 s | |
| Extension | 72°C | 1 min | |
| Final extension | 72°C | 7 min | 1 |
| Cooling | 22°C | | |

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

FOR RESEARCH USE
APPROVED DATE: 20.06.2020

Manager: Hana Těšitelová