

**CERTIFICATE OF ANALYSIS**

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| <b>Product Name:</b>       | PCR dNTP mix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Catalog Number:</b>     | P041, P141, P142                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Lot Number:</b>         | P041122027                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Expiry Date:</b>        | 12/2027                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Composition:</b>        | PCR dNTP mix is a water solution containing ultrapure mixture of each of the four dNTPs (dATP, dCTP, dGTP, dTTP), pH 7.5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Supplied Form:</b>      | 0.5 ml plastic tube containing 100 µl PCR dNTP mix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Storage Conditions:</b> | Store at -20 ± 5 °C. Material can be thawed and refrozen repeatedly without loss of performance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Purity:</b>             | 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: <table><tr><td><b>Test conditions:</b></td><td>41.5 µl PCR H<sub>2</sub>O<br/>5 µl 10x PCR Blue Buffer with 25 mM MgCl<sub>2</sub><br/>1 µl 10 mM <b>PCR dNTP mix</b> (10 mM for each, dATP, dCTP, dGTP, and dTTP)<br/>0.5 µl 50 µM 5' primer (5'-ATGAACCCAGCCATCAGCG-3'<br/>0.5 µl 50 µM 3' primer 5'-GGGTAAGGACCTTGATATAGG-3'<br/>0.5 µl Taq DNA polymerase 5U/ µl (2.5 U total)<br/>1 µl DNA containing 80 ng of mouse genomic (tail) DNA.</td></tr><tr><td><b>Cycling conditions:</b></td><td>94°C, 2 min initial denaturation, followed by 40 cycles of<br/>94°C, 15 s (denaturation)<br/>54°C, 15 s (annealing)<br/>72°C, 60 s (extension)</td></tr><tr><td><b>Result:</b></td><td>As expected, electrophoresis of the PCR product on agarose gel revealed one band of 864 bp.<br/>passed</td></tr></table> | <b>Test conditions:</b> | 41.5 µl PCR H <sub>2</sub> O<br>5 µl 10x PCR Blue Buffer with 25 mM MgCl <sub>2</sub><br>1 µl 10 mM <b>PCR dNTP mix</b> (10 mM for each, dATP, dCTP, dGTP, and dTTP)<br>0.5 µl 50 µM 5' primer (5'-ATGAACCCAGCCATCAGCG-3'<br>0.5 µl 50 µM 3' primer 5'-GGGTAAGGACCTTGATATAGG-3'<br>0.5 µl Taq DNA polymerase 5U/ µl (2.5 U total)<br>1 µl DNA containing 80 ng of mouse genomic (tail) DNA. | <b>Cycling conditions:</b> | 94°C, 2 min initial denaturation, followed by 40 cycles of<br>94°C, 15 s (denaturation)<br>54°C, 15 s (annealing)<br>72°C, 60 s (extension) | <b>Result:</b> | As expected, electrophoresis of the PCR product on agarose gel revealed one band of 864 bp.<br>passed |
| <b>Test conditions:</b>    | 41.5 µl PCR H <sub>2</sub> O<br>5 µl 10x PCR Blue Buffer with 25 mM MgCl <sub>2</sub><br>1 µl 10 mM <b>PCR dNTP mix</b> (10 mM for each, dATP, dCTP, dGTP, and dTTP)<br>0.5 µl 50 µM 5' primer (5'-ATGAACCCAGCCATCAGCG-3'<br>0.5 µl 50 µM 3' primer 5'-GGGTAAGGACCTTGATATAGG-3'<br>0.5 µl Taq DNA polymerase 5U/ µl (2.5 U total)<br>1 µl DNA containing 80 ng of mouse genomic (tail) DNA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Cycling conditions:</b> | 94°C, 2 min initial denaturation, followed by 40 cycles of<br>94°C, 15 s (denaturation)<br>54°C, 15 s (annealing)<br>72°C, 60 s (extension)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |
| <b>Result:</b>             | As expected, electrophoresis of the PCR product on agarose gel revealed one band of 864 bp.<br>passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |                                                                                                                                                                                                                                                                                                                                                                                             |                            |                                                                                                                                             |                |                                                                                                       |

FOR RESEARCH USE

APPROVED DATE: 04.08.2025

Manager: Hana Těšitelová