

**CERTIFICATE OF ANALYSIS**

**Product:** TP HS DNA-free 2x Master Mix

**Catalog No:** T621, T622, T623

**Lot No:** T621122022

**Date of Expiry:** 12/2022

**Composition:** 2x concentrated TP HS DNA-free 2x Master Mix contains: 150 mM Tris-HCl, pH 8.8 (25°C), 40 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 0,4 M trehalóza, 2 M 1,2-propandiol, 0.02% Tween 20, 5 mM MgCl<sub>2</sub>, 400 μM dATP, 400 μM dCTP, 400 μM dGTP, 400 μM dTTP, Taq DNA polymerase (50 U/ml), stabilizers and additives.

**Supplied with:** PCR Ultra H<sub>2</sub>O (Cat. No. P040)

**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	TP HS DNA-free M. Mix	1x Master Mix (75 mM Tris-HCl, pH 8.8, 20 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , 0,2 M trehalóza, 1 M 1,2-propandiol, 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)
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
10.5 μl	PCR Ultra H <sub>2</sub> 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: 02.08.2020  
Manager: Hana Těšitelová