

CERTIFICATE OF ANALYSIS

Product:	TP HS DNA-free 2x Master Mix
Catalog No:	T621, T622, T623
Lot No:	T621102024
Date of Expiry:	10/2024
Composition:	2x concentrated TP HS DNA-free 2x Master Mix contains: 150 mM Tris-HCl, pH 8.8 (25°C), 40 mM (NH ₄) ₂ SO ₄ , 0,4 M trehalóza, 2 M 1,2-propandiol, 0.02% Tween 20, 5 mM MgCl ₂ , 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 ₂ 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 ₄) ₂ SO ₄ , 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 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:** 14.07.2022
Manager: Hana Těšitelová