

CERTIFICATE OF ANALYSIS

Product:	TP HS DNA-free 2x SYBR Master Mix
Catalog No:	T625, T626, T627
Lot No:	T625122025
Date of Expiry:	12/2025
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	qPCR 2x SYBR Master Mix	1x qPCR 2x SYBR Master Mix
0.5 μl	Forward primer	50 μM 5' primer, 5'-TTGGAGAGTTTGATCCTGGCTC-3'
0.5 μl	Reverse primer	50 μM 3' primer 5'-TTGGAGAGTTTGATCCTGGCTC-3'
1 μl	Template DNA	containing 10 ng of E-coli DNA
10.5 μl	PCR Ultra H ₂ O	(to a final volume 25 μl)

Cycling conditions on LightCycler 96, ROCHE:

	Temperature	Time	Number of cycles
Initial denaturation	94°C	3 min	1
Denaturation	94°C	10 s	35
Annealing of primers	55°C	10 s	
Extension	72°C	10 s	
Final extension	72°C	7 min	1
Cooling	22°C		

Result: As expected, Ct values were between 18 - 20, whereas in the absence of DNA Ct >35. Furthermore, electrophoresis of the PCR product on agarose gel revealed one band of 173 bp.

FOR RESEARCH USE

APPROVED DATE: 14.12.2023
Manager: Hana Těšitelová