

CERTIFICATE OF ANALYSIS

Product:	LA Hot Start Master Mix
Catalog No:	L608, L609, L610, L610xl
Lot No:	L608032027
Date of Expiry:	03/2027
Composition:	2x concentrated LA Hot Start Master Mix contains: 150 mM Tris-HCl, pH 8.8 (at 25°C), 40 mM (NH ₄) ₂ SO ₄ , 0.02% Tween 20, 5 mM MgCl ₂ , 400 μM dATP, 400 μM dCTP, 400 μM dGTP, 400 μM dTTP, 100 U/ml Taq DNA polymerase blend, monoclonal antibody anti-Taq (38 nM), dye, 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 polymerases is verified electrophoretically (SDS PAGE). 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	LA Hot Start Master Mix	1x LA Hot Start Master Mix (75 mM Tris-HCl, pH 8.8, 20 mM (NH ₄) ₂ SO ₄ , 0.01% Tween 20, 2.5 mM MgCl ₂ , 200 μM dATP, 200 μM dCTP, 200 μM dGTP, 200 μM dTTP, 50 U/ml blend of DNA polymerases, 19 nM anti-Taq monoclonal antibody)
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: 16.12.2024

Manager: Hana Těšitelová