

## CERTIFICATE OF ANALYSIS

<b>Product:</b>	LA Hot Start Plain Master Mix
<b>Catalog No:</b>	L611, L612, L613, L613xl
<b>Lot No:</b>	L611122022
<b>Date of Expiry:</b>	12/2022
<b>Composition:</b>	2x concentrated LA Hot Start Plain Master Mix contains: 150 mM Tris-HCl, pH 8.8 (at 25°C), 40 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , 0.02% Tween 20, 5 mM MgCl <sub>2</sub> , 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), stabilizers and additives.
<b>Supplied with:</b>	PCR Ultra H <sub>2</sub> O (Cat. No. P040).
<b>Storage temperature:</b>	For short terms (days) at 4°C ± 3°C. For long terms at -20 ± 5°C. Material can be repeatedly defrosted.
<b>Purity:</b>	Purity of Taq DNA polymerases is verified electrophoretically (SDS PAGE). Material is free of nucleases.
<b>Functional Test:</b>	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 Plain Master Mix	1x LA Hot Start Plain Master Mix (75 mM Tris-HCl, pH 8.8, 20 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , 0.01% Tween 20, 2.5 mM MgCl <sub>2</sub> , 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 <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:** 07.06.2020

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