Lolina A/S

Address:Sindalsvej 30 8240 Risskov Danmark

Email: Info@lolina.dk

Website:https://lolina.dk

Product Specification

Product name	2 × Lolina® HotStart PCR Genotyping Master Mix (With Dye)
Cat.No.	NaM201007-2
Size	1 mL/5×1 mL/50×1 mL/100×1 mL
Storage and shipping	The product is shipped with dryice and can be stored at -20℃ for 2 year.
Application	For mouse genotyping mainly
QC	**Exonuclease residue detection:** 20 μL of this product and 0.6 μg λ DNA-Hind III were incubated for 4 h at 37°C. There was no change in the electrophoresis band of DNA. **Endonuclease residue detection:** 20 μL of this product and 1 μg of λDNA were incubated at 37°C for 4 hours. There was no change in the DNA electrophoresis band. **Detection of Escherichia coli residual DNA:** Add 25 μL of this product to a 50 μL system, and use sterile ddH_2O as a template to amplify the E.coil 16s rDNA gene. After 30 cycles, the amplified products were subjected to 1% agarose gel electrophoresis and EB staining, and no amplified bands were found.

Product description

2 × Lolina® HotStart PCR Genotyping Master Mix (With Dye) is a ready-to-use PCR premix solution, containing Lolina® HotStart Taq DNA Polymerase, dNTPs and an optimized buffer system. Just add primers and templates for amplification, greatly simplifying the experimental steps and enabling high-throughput operation and improve the reproducibility of experimental results. Lolina® HotStart Taq DNA Polymerase is a thermostable Taq DNA Polymerase modified with a ligand that modulates DNA polymerase activity as a function of temperature. Enzyme activity is completely blocked at room temperature and is released after heating to 95°C. Lolina® HotStart DNA Polymerase requires only 2-3 minutes to activate and is compatible with existing PCR protocols. This

product prevents non-specific amplification during sample preparation and reaction heating stages, and can effectively perform genotyping experiments.

Instructions

1. Recommended PCR Reaction System (50 μL)

Components	Volume μL	Final concentration
2 × Lolina® HotStart PCR Genotyping Master Mix (With Dye)	25	1 ×
Template	x	-
Forward Primer (10 μmol/L)	2	0.4 μmol/L
Reverse Primer (10 μmol/L)	2	0.4 μmol/L
ddH_20	Up to 50	-

[Note]:

The optimal reaction concentration for different templates is different. The following table is the recommended template usage for a 50 μL reaction system, which is for reference only.

Components	Volume μL
Genomic DNA	50 ng-100 ng
Plasmid DNA	100 pg-20 ng
cDNA	1-5 μL (no more than 1/10 of the reaction system)

2. Reaction program

Cycle step	Temp.	Time	Cycles
Initial denaturation	95 °C	5 min	1
Denaturation	95 °C	30 sec	35
Annealing	50-60 °C	30 sec	
Extension	72 °C	30 sec	
Final extension	72 °C	10 min	1

[Note]:

1) Annealing temperature and time: The recommended annealing temperature is 50-60°C. The recommended annealing time is 30 sec, which can be adjusted within 20-30 sec. As needed, a temperature gradient can be set up to find the optimal temperature and time for index annealing.

2) Extension temperature and time: The recommended temperature is 72°C. The recommended time is 30-60 sec/kb.

3) Amplification product: Please store the PCR amplification product at -20°C to prevent DNA degradation.

Notes

1. This product is for research use only.

2. Please operate with lab coats and disposable gloves for your safety.