# Lolina A/S

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### **Product Specification**

Product name	2×Lolina® Robust PCR Master Mix (With Dye)		
Cat.No.	NaM201004-2		
Size	1 mL/5×1 mL/100×1 mL		
Storage and shipping	The product is shipped with dryice and can be stored at -20°C for 2 year.		

## **Product description**

 $2 \times \text{Lolina}$  Robust PCR Master Mix (With Dye) uses modified Taq DNA Polymerase, adding powerful extension factors, amplification enhancement factors and an optimized buffer system. The amplification speed and amplification yield are a qualitative leap compared to ordinary PCR Mix. The amplification speed can reach 15 sec/kb, which is suitable for fast PCR reactions. The ultimate amplification speed within 1 kb can reach 5 sec/kb, which greatly saves PCR reaction time. The premix contains dNTP and Mg<sup>2+</sup>. When using it, you only need to add primers and templates for amplification, which greatly simplifies the experimental steps. The Mix contains electrophoresis indicator dye, which can be used for electrophoresis directly after the reaction is completed, making it easy to use. The protective agent added to the system allows the Master Mix to maintain stable activity after repeated freezing and thawing. The 3' end of the PCR product contains A and can be easily cloned into a T vector.

### Instructions

#### 1. Recommended PCR Reaction System (50 µL)

Components	Volume µL
2 ×Lolina® HotStart PCR Genotyping Master Mix (With Dye)	25
Template	х
Forward Primer (10 µmol/L)	2.5
Reverse Primer (10 µmol/L)	2.5
ddH <sub>2</sub> 0	Up to 50

#### 2. Reaction program

Cycle step	Temp.	Time	Cycles
Initial denaturation	94 °C	3-5 min	1
Denaturation	94 °C	10 sec	
Annealing	55 °C	20 sec	30-35
Extension	72 °C	15-30 sec/kb	
Final extension	72 °C	5 min	1

[Note]: Please be sure to mix it thoroughly before use.

1) Template usage amount: human genomic DNA: 30-100 ng; E. coli genomic DNA: 10-100 ng;  $\lambda$ DNA: 0.5-5 ng; plasmid DNA: 0.1-10 ng.

2)  $Mg^{2+}$  concentration: This product contains 3 mM MgCl<sub>2</sub>, which is suitable for most PCR reactions.

3) Annealing temperature: Please refer to the theoretical Tm value of the primer. The annealing temperature can be set  $1-2^{\circ}$ C lower than the theoretical value of the primer.

4) Extension speed: 5-15 sec/kb can be selected for genes within 1 kb in length.

#### Notes

1. This product is for research use only.

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