

2×AMPQX® Robust PCR Master Mix

Cat. no. LM201004-1

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Product Information

Product	2 × AMPQX® Robust PCR Master Mix
Catalog No.	LM201004-1
Size	1 mL/5 × 1 mL/50 × 1 mL/100 × 1 mL
Storage conditions	This product should be stored at -20 °C for 2 years.

2. Product description

2×AMPQX® Robust PCR Master Mix selected the modified Taq DNA Polymerase, added strong extension factor, amplification enhancement factor and optimized buffer system, and the amplification speed and amplification yield have a qualitative leap compared with ordinary PCR Mix. The amplification speed can reach 15 sec/kb, which is suitable for rapid PCR reactions. The limit amplification speed within 1 kb can reach 5 sec/kb, greatly saving the PCR reaction time. The premixed solution contains dNTP and Mg²⁺, including with primers and templates, greatly simplifying the operation steps of the experiment. The addition of the protective agent to the system allows the Master Mix to maintain a stable activity after repeated freezing and thawing. The 3' end of the PCR product bands A and can be easily cloned into the T vector. This product contains no dye, and the PCR product should add Loading buffer before electrophoresis.

3. Instructions

3.1. Recommended PCR reaction systems

Components	Volume (μL)	Final concentration
Template	x	-
Forward Primer 10 μmol/L	2.5	-
Reverse Primer 10 μmol/L	2.5	-
ddH ₂ O	Up to 50	-
2× AMPQX® Robust PCR Master Mix	25	-

[Note]: Mix mix thoroughly before use.

a) Template usage: human genomic DNA: 30-100 ng; Escherichia coli genomic DNA: 10-100 ng; λ DNA: 0.5-5 ng; plasmid DNA: 0.1-10 ng

b) Mg²⁺ concentration: This product contains 3 mM of MgCl₂, which is suitable for most PCR reactions.

3.2. Reaction program

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

[Note]:

- a) Annealing temperature: please refer to the theoretical T_m value of the primer, and the annealing temperature can be set below the theoretical value of the primer of 1-2°C
- b) Extension speed: genes within 1 kb can be selected 5-15 sec / kb.

4. Notes

1. For your safety and health, please wear a lab coat and disposable gloves during operation.
2. This product is for research use only!
3. The PCR product of this product is not suitable for polyacrylamide gel electrophoresis.
4. The PCR reaction system should be prepared on ice, the system is mixed and quickly placed in the PCR instrument for reaction.