

## QKGEN® 2× HiFi PCR Master Mix (With Dye)

### Product description

QKGEN® 2× HiFi PCR Master Mix (With Dye) is a ready-to-use 2× pre-mixed solution containing QKGEN® High-Fidelity DNA Polymerase, dNTPs, and an optimized buffer system, which contains pre-added electrophoresis indicators. The pre-mix contains pre-added electrophoresis indicator, PCR products can be directly electrophoresed, the amplification products are flat ends. QKGEN® 2× HiFi PCR Master Mix (With Dye) has the advantages of quick and easy, high sensitivity, high specificity, good stability, etc., the reaction system can be added with only the primers and templates. In addition, the product also contains a specific protective agent, so that the premix can still maintain stable activity after repeated freezing and thawing.

### Specifications

Name	Cat. No.	Q10164-1	Q10164-2	Q10164-3
QKGEN® 2× HiFi PCR Master Mix (With Dye)	Size	250 µL	1 mL	5 ×1 mL

### Storage

This product should be stored at -25~-15°C for one year.

### Instructions

#### 1.Recommended PCR reaction systems.

Components	Volume(µL)	Final concentration
QKGEN® 2× HiFi PCR Master Mix (With Dye) <sup>a</sup>	25	1×
Template <sup>b</sup>	X	-
Forward Primer(10 µmol/L) <sup>c</sup>	2	0.4 µmol/L
Reverse Primer(10 µmol/L)	2	0.4 µmol/L
ddH <sub>2</sub> O	up to 50	

[Note]:

- In 1× premixes containing 2 mM Mg<sup>2+</sup> and 200 µM dNTPs.
- Recommended range 10-200 ng, cDNA sample upload volume range not more than 1/10 of the reaction system, recommended 1-2.5 µL.
- The final primer concentration in the PCR reaction system ranges from 0.2-1 µM, and 0.4 µM is recommended.

#### 2.PCR Reaction program

Cycle step	Temp.	Time	Cycles
Initial denaturation	98°C	30 sec	1
Denaturation	98°C	10 sec	30-35
Annealing <sup>a</sup>	60°C	5 sec	
Extension <sup>b</sup>	72°C	5-10 sec / kb	
Final extension	72°C	2 min	1

[Note]:

- Recommended temperature: 60°C, a temperature gradient can be set up to find the optimal temperature for primer annealing. The recommended annealing time is set to 5 sec and can be adjusted from 5-30 sec. Too long annealing time may result in diffuse amplification products on the gel.
- Extension time: Recommended 5 sec/kb, can also be extended to 10 sec/kb as needed.

## Notes

1. For your safety and health, please wear a lab coat and disposable gloves when operating.
2. This product is for research use only!