

Fast HiFidelity PCR Kit

: KP202
: -20 **1**
: 2.5 U/μl
:

	KP202-01 (50 μl × 50 rxn)	KP202-02 (50 μl × 200 rxn)
Fast HiFidelity Polymerase	125 U	500 U
5× Fast HiFidelity PCR Buffer*	500 μl	2×1 ml
20× Fast PCR Enhancer	500 μl	500 μl
5× DNA Loading Buffer	500 μl	2×1 ml

* dNTPs Mg²⁺

A/B

Order: 010-59822688

Toll-free: 800-990-6057/400-810-6057

TIANGEN BIOTECH (BEIJING) CO., LTD.

Fast HiFidelity Polymerase

Pyrococcus spp

Proofreading

Polymerase 80

3'-5'
Taq DNA

A

DNA

Polymerase

B 3'-5'

DNA

Hot Start PCR

dNTPs

Buffer

Mg²⁺

Mg²⁺

PCR

A

T

TIANGEN

VT204

1. Fast HiFidelity Polymerase 3'-5'
 Taq DNA Polymerase 80

2.

15-30 sec/kb Taq DNA Polymerase 2-4

3.

Hot Start

PCR

DNA	~6 kb
DNA	~10 kb
cDNA	~6 kb
λ DNA	~15 kb

Fast HiFidelity Polymerase PCR

5 \times DNA

Loading Buffer

PCR

Template	***
Primer 1* 10 μ M	2.0 μ l
Primer 2* 10 μ M	2.0 μ l
5 \times Fast HiFidelity PCR Buffer	10.0 μ l
Fast HiFidelity Polymerase	1.0 μ l
20 \times Fast PCR Enhancer**	2.5 μ l
DMSO****	1-2.5 μ l
ddH ₂ O	50 μ l

* 0.4 μ M

PCR

PCR

PCR

0.2-1.0 μ M

****20× Fast PCR Enhancer**

***** DNA 50 µl PCR**

DNA	5-200 ng	100-200 ng
DNA	0.1-100 ng	1-10 ng
cDNA	50-200 ng	50-100 ng
λDNA	10 pg-10 ng	1-10 ng

****** GC PCR**
2-5% DMSO DMSO
Tm 68

PCR

1. Fast HiFidelity Polymerase

30 sec/kb

94	2 min		
94	15 sec		
60	§ 10 sec	}	35 cycles
68	15-30 sec/kb		
68	5 min		

§ 60

PCR 60-68 Tm 63 Tm

2.

Step down PCR	PCR		
94	2 min		
94	15 sec	}	35 cycles
68	30 sec/kb		
68	5 min		

3.

5 µl

		1 min/ kb
		2-5
		Step down PCR() 6 kb
		cDNA () PCR ()
		20× Fast PCR Enhancer
		2-5% DMSO
		50 μl 2.5 U 3.75-5 U
		Step down PCR
		2-5
		()
		50 μl 2.5U 1.25-2 U