Product information ExcelTaq™ series

5X PCR Master Mix

TP1100	**200 RXN**	
	5X PCR Master Mix	1 ml × 2
	6X DNA Loading Dye (Blue)	1 ml × 2

Storage

4°C for 6 months
-20°C for 24 months

Caution: Avoid Multiple Freeze/Thaw Cycles

Description

The ExcelTaq™ 5X PCR Master Mix is a ready-to-use mixture for amplifying targeted DNA fragments. It is designed to serve as a master mix for virtually all PCR applications. The mixture contains all components for PCR with the exception of templates and primers. This not only saves valuable time in the laboratory, but also reduces pipetting and reagent handling errors. The PCR Master Mix is supplied as a 5X concentrated ready-to-use mixture of recombinant *Taq* DNA Polymerase, reaction buffer, $MgCl_2$, dNTP, and enzyme stabilizer enabling efficient amplification of template in PCR and allows the user to prepare a PCR reagent conveniently. This product is supplied with 6X DNA Loading Dye (Blue) containing two tracking dyes (Xylene cyanol FF and Bromophenol blue) for post PCR analysis through the use of agarose gel electrophoresis.

5X PCR Master Mix

TP1100

SMOBIO®
Small Bio, Smart Tool

Features

- 5'→3' DNA polymerase activity
- No detectable 3'→5' exonuclease (proofreading) activity
- Generates PCR products with 3'-dA overhangs
- High yield PCR
- High reproducibility
- Reduced pipetting errors

Applications

- Routine PCR
- Colony PCR
- High throughput PCR
- Amplification of DNA fragments up to 8 kb
- Generation of PCR products for TA cloning
- DNA labeling

Recommended PCR Condition

Template	1 – 150 ng
Forward primer	0.1 – 0.5 µM
Reverse primer	0.1 – 0.5 µM
5X PCR Master Mix	10 µl
ddH_2O	to 50 µl
Total volume	50 µl

Recommended PCR Program

94°C	2 min	
94°C	30 sec	25 ~ 40 cycles
50~68°C*	30 sec	
72°C	30 sec/kb	
72°C	1 min	

*Optimal PCR condition varies according to primers' thermodynamic properties.

Quality Control

Functional Testing

ExcelTaq™ 5X PCR Master Mix is tested for performance in the polymerase chain reaction (PCR) in a 50 µl standard reaction condition to amplify a 665 bp gene from 10 pg of tested plasmid DNA. The resulting PCR product is visualized as a single band on an ethidium bromide-stained agarose gel.

Nuclease Assay

No contaminating endonuclease or exonuclease activity was detected using pUC19 incubated with ExcelTaq™ 5X PCR Master Mix (1:5 dilution) for 4 hours at 37°C.

Residual Nucleotides Assay

No contaminating residual nucleotides were detected from ExcelTaq™ 5X PCR Master Mix by PCR assay.

Other Information

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Caution: Not intended for human or animal diagnostic or therapeutic uses.

Related Products

CK1000	Champion E. coli Transformation Kit
CV1100	GetClone PCR Cloning Vector II, 20 RXN
DM1100	ExcelBand 50 bp DNA Ladder, 500 µl
DM2100	ExcelBand 100 bp DNA Ladder, 500 µl
DM2300	ExcelBand 100 bp+3K DNA Ladder, 500 µl
DM3100	ExcelBand 1 KB (0.25-10 kb) DNA Ladder, 500 µl
NS1000	FluoroVue Nucleic Acid Gel Stain (10,000X), 500 µl
RP1000	ExcelRT Reverse Transcriptase, 20,000 U
TF1000	SMO-HiFi DNA Polymerase, 100 U
TF3000	G-HiFi DNA Polymerase, 100 U
TP1000	ExcelTaq DNA Polymerase, 500 U
TP1200	ExcelTaq 5× PCR Master Dye Mix, 200 RXN
TP1260	ExcelTaq 5× Fluorescent PCR Master Mix, 200 RXN
TP2100	ExcelTaq Blood Direct PCR Master Mix Kit, 200 RXN
TP5000	ExcelTaq Hot Start II DNA Polymerase, 500 U
TQ1110	ExcelTaq 2× Q-PCR Master Mix (SYBR, ROX), 200 RXN
VE0100	B-BOX Blue Light LED epi-illuminator, AC 100-240V, 50/60Hz

B-BOX™ Blue Light LED epi-illuminator

For research use only
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