

PuriTaq 2 x PCR Master Mix

Cat No. PU-TQC-100
Storage: -20°C
Lot: 8932745 17MD
Size: 2 x Master Mix, 1 mL
40 RXN/50 ul; 100 RXN/20 ul reaction volume

Description:

PuriTaq 2 x PCR Master Mix is a 2X ready-to-use solution containing Taq DNA Polymerase, dNTP mixture, reaction buffer and loading dye in one tube. Just add template and primer needed for running PCR. An inert blue dye and a stabilizer are also present to allow direct loading of the final products on to a gel for analysis. PuriTaq 2 x PCR Master Mix are designed to allow the user for quick and easy preparation of reaction mixture. The chance of contaminating component stocks is eliminated. Reduction of reagent handling steps leads to better reproducibility.

Features:

High-precision-

The error rate of mutation frequency is 10^{-5} /bp/duplication

Higher – yield-

Efficient and amplification of fragments up to 5 kb.

Component:

Thermostable Taq DNA polymerase
Inert blue dye and a stabilizer
dNTP mix including dATP、dCTP、dGTP、dTTP
5 mM MgCl₂

PCR performance test

High sensitivity of PCR is confirmed by using 50 copies plasmid as the template (amplified fragment: 450 bp)

Basic Reactions Conditions:

Components	Volume		Final Concentration
2 X PuriTaq Master Mix	25 ul	10 ul	1 X
Forward primer (10 uM)	0.5~2.5 ul	0.2~1 ul	0.1~0.5 uM
Reverse primer (10 uM)	0.5~2.5 u	0.2~1 ul	0.1~0.5 uM
Template DNA	1~5 ul	1~2 ul	Genomic DNA 10~250 ng
			Plasmid DNA 0.1~10 ng
Autoclaved, distilled water	Up to 50 ul	Up to 20 ul	

Cycling parameters:

Stage	cycle	Temperature	Duration	Purpose
Stage 1	1	94°C	1 min	Initial denature of template
Stage 2	30~40	94°C	20~40 sec	Denaturation
		55~65°C	30~60 sec	Annealing
		72°C	X min*	Elongation
Stage 3	1	72°C	7 min	Final elongation
Stage 4	1	4°C	Forever	

* The elongation time should base on target size, usually 1 min/kb PCR target.

Related products:

Cat.	Product	Size	Product	Features
PU-TQB-250	PuriTaq DNA polymerase	250 U	6 kb	PuriTaq (5 U/μl) 50 μl x 1 10 x PCR Buffer for PuriTaq 1 ml
PU-TQB-500	PuriTaq DNA polymerase	500 U	6 kb	PuriTaq (5 U/μl) 100 μl x 1 10 x PCR Buffer for PuriTaq 1 ml x 2
PU-TQC-050	PuriTaq 2x PCR Master Mix	0.5 mL	5 kb	2x liquid PCR Master Mix, with loading dye
PU-TQC-100	PuriTaq 2x PCR Master Mix	1 mL	5 kb	2x liquid PCR Master Mix, with loading dye