



PCR Polymerase chain reaction (PCR) V.6

Shuning Guo¹

¹2021 iDEC NEFU_China

Version 6 ▾

Oct 05, 2021

1 Works for me

Share

dx.doi.org/10.17504/protocols.io.bysrpwd6

2021 iDEC NEFU_China

Shuning Guo

ABSTRACT

This protocol is used to amplify target DNA fragment for plasmid construction or other use.

DOI

dx.doi.org/10.17504/protocols.io.bysrpwd6

PROTOCOL CITATION

Shuning Guo 2021. Polymerase chain reaction (PCR). **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.bysrpwd6>

Version created by Shuning Guo



LICENSE

This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

CREATED

Oct 05, 2021

LAST MODIFIED

Oct 05, 2021

PROTOCOL INTEGER ID

53809

MATERIALS TEXT

2×High Fidelity Master Mix (MCLAB)/2×Rapid Master Mix (Vazyme)

ddH2O

Template

F/R Primer

Thermo cycler.

SAFETY WARNINGS

Please wear gloves for the experiment, don't try to touch the lid after PCR program

initiation.

BEFORE STARTING

Set up a small box with ice, put DNA and 2×high Fidelity Master Mix (MCLAB)/or 2×Rapid Master Mix (Vazyme) into it before going into the thermocycler.

- 1 Choose one case from the cases below.

Step 1 includes a Step case.

Simple PCR for amplifying target DNA fragments

Colony PCR

step case

Simple PCR for amplifying target DNA fragments

- 2 Add the following reagent to a PCR tube.(50 µl).

A	B
2×High Fidelity Master Mix (MCLAB)	25 µl
Template	1 µl
Forward Primer (10 µM)	1 µl
Reverse Primer (10 µM)	1 µl
ddH2O	22 µl

- 3 Program the thermocycler as follows:

A	B
Temperature	Time
95/98°C	5 min
95/98°C	30 s
Tm-3~5°C	30 s
72°C	1kbp/min
72°C	5~10 min
16°C	∞

Repeat 30 times in 3-5 steps

- 4 Use the palm centrifuge to mix the solution in PCR tube.

- 5 Put the PCR tube into the thermocycler and Run the program.

6 Using agarose gel electrophoresis to confirm if correct construct was present.