

Taq DNA Polymerase

Cat: C101001 (250 U, 50 µL)

Cat: C101002 (500 U, 100 µL)

Store at -20°C

Contents:

Component	C101001	C1011002
Taq DNA poly. 5 U/µl	250 U	500U
MgCl ₂ Solution 25 mM	0.5 ml	1 ml
10X Buffer MgCl ₂ free	0.5 ml	1 ml

Description:

Taq DNA Polymerase is a high quality purified recombinant enzyme and catalyze 5'→3' synthesis of DNA. The enzyme has no detectable 3'→5' proofreading exonuclease activity. It is provided with 10X reaction buffer that will enable or improve sub-optimal PCR caused by templates that have a high degree of secondary structure or that are GC-rich.

Kit storage:

This kit should be stored at -20 °C. Under this condition reagents are stable for two years from the date of production.

General Reaction Protocol:

1. Thaw 10X reaction buffer, dNTP mixture.
2. Mix the master mix thoroughly and dispense appropriate volumes into PCR tubes or plates.

Component	Volume	Final Conc.
10X Reaction Buffer	2 µL	1X
MgCl ₂ Solution 25 mM	1.2 µL	1.5 mM
40 mM dNTPs Mix (10 mM each)	0.4 µL	0.2 mM
Upstream Primer (10 pmol/ µL)	1 µL	0.5 pmoles/µL
Downstream Primer (10 pmol/µL)	1 µL	0.5 pmoles/µL
Template DNA	Variable	10 fg~1 µg
PCR grade water	Variable	-
Taq DNA poly. 5 U/µl	0.25 µL	-
Total Volume	20 µL	-

3. Add templates DNA to the individual PCR tubes or wells containing the master mix.
4. Program the PCR machine according to the program outlined.

Cycle	Time	Temp °C
1	4 min	95
	30 sec	94
30-35	30 sec	57
	30-60 sec	72
1	5 min	72

Notes:

Extension temperature is between 68 and 72 °C. We highly recommend 68 °C for more efficiency of Pars Tous Taq DNA polymerase.

* For PCR products longer than 3~4 Kb, use an extension time of approximately 1 min. per Kb DNA.

* A DNA fragment which is amplified by Taq DNA polymerase has A-overhang, and it enables you to do cloning by using T-vector

Agarose gel Electrophoresis:

Run the total 5-7 µL of PCR products alongside 3µL DNA marker on a 2% agarose gel containing Green viewer DNA safe stain.

Disclaimers and Addresses:

This product is for **Research Use Only** and should only be used by trained professionals.

Unit 18, North East Food tech park, Tous Industrial Zone, Mashhad- IRAN

Tel :(+98-51)35420843-5
www.parstous.com

Fax: (+98-51) 35420846
info@parstous.com