

## dNTP Mixture (10 mM each)

Cat: C101071 (200 µL)

Store at -20 °C

### Contents:

Component	Volume
dNTP Mixture (10 mM each)	0.2 ml

### Description:

*dNTP* Mixture is aqueous solutions at pH 7.0 containing dATP, dCTP, dGTP and dTTP, each at a final concentration of 10 mM. dNTP mixes are ready-to-use solutions designed to save time and to provide higher reproducibility in PCR and other applications.

### Concentration:

Total 40 mM (10 mM dATP, 10 mM dCTP, 10 mM dGTP and 10 mM dTTP)

### Kit storage:

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

### General Reaction Protocol:

Component	Volume	Final Conc.
10X Reaction Buffer	2 µL	1X
MgCl <sub>2</sub> Solution 25mM	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	-
Total Volume	20 µL	-

1. Thaw 10X reaction buffer, dNTP mixture.
2. Mix the master mix thoroughly and dispense appropriate volumes into PCR tubes or plates.
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
30-35	30 sec	94
	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.

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