

## ExPrime Taq Premix (2X)

Cat. No.	Size	Remark
G-5000	1 mL	2X concentration

### Package Information

G-5000	2X ExPrime Taq Premix (1.0 mL X 1) - with ExPrime Taq DNA Polymerase, reaction buffer, enzyme stabilizer, dNTPs mixture and loading dye
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### Description

ExPrime Taq Premix is composed of ExPrime Taq DNA Polymerase, reaction buffer, dNTP mixture, enzyme stabilizer and sediment which is needed for electrophoresis, and loading dye, and these components maximize the convenience of the users.

Also ExPrime Taq Premix is easy to obtain PCR products in case of over 5 Kb as well as under 10 Kb of DNA amplified products (Long PCR).

### Composition of 2X Premix

ExPrime Taq DNA Polymerase 1 unit/10 $\mu$ l, 2X reaction buffer, 4mM MgCl<sub>2</sub>, enzyme stabilizer, sediment, loading dye, pH 9.0 and 0.5 mM each of dATP, dCTP, dGTP, dTTP.

### Usage Information

- A DNA fragment which is amplified by ExPrime Taq Premix has A-overhang, and it enables you to do cloning by using T-vectors.
- This product is sold for research purpose only. This is not to be used for human diagnostic or drug purposes.
- All claims must be brought within expired date.

■ Research Use Only

■ Store at -20°C

(Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes.)

### Protocol

Optimal reaction conditions, such as reaction time, temperature and amount of template DNA, may vary and must be individually determined.

1. Thaw 2X ExPrime Taq Premix solution.

2. Prepare a master mix.

Components	Volume	Final Conc.
2X ExPrime Taq Premix	10 $\mu$ l	1x
Upstream Primer	Variable	0.1 ~ 1.0 $\mu$ M
Downstream Primer	Variable	0.1 ~ 1.0 $\mu$ M
Template DNA <sup>(1)</sup>	Variable	10 fg~1 $\mu$ g
Sterilized D.W	add up to 20 $\mu$ l	
Total Volume	20 $\mu$ l	

(1) Amount of template:

- Bacteriophage lambda, cosmid, plasmid: 10 fg ~ 300 ng
- Total genomic DNA: 100 ng ~ 1  $\mu$ g

3. Mix the master mix and dispense appropriate volumes into PCR tubes. Centrifuge the reactions in a microcentrifuge for 10 seconds.

4. Perform PCR using your standard parameters (3-step cycling).

Step	Temp. & Time		Cycles
	Temp.	Time	
Initial denaturation	95°C	5 min.	1
Amplification	95°C	30 sec.	25 ~ 45
	50~60°C	30 sec.	
	72°C	30~60 sec.	
Final extension	72°C	5 min.	1

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

5. Separate the PCR products by agarose gel electrophoresis and visualize with EtBr or any other means.