

Taq DNA Polymerase

Cat.No.: OET01-M

Description: *Taq* DNA polymerase is useful in general PCR. You may modify the amount of template, extension time, annealing temperature, amount of *Taq* DNA polymerase, the number of PCR cycle according to the target size, primer's T_m and the type of templates for amplification.

Product contents:

- 1) *Taq* DNA Polymerase (5U/ μ L), 1000U
- 2) 10X *Taq* Reaction buffer (without $MgCl_2$), 1.8mL
- 3) 25mM $MgCl_2$, 1mL

Features

Source	<i>Thermus aquaticus</i>
5'→3' exonuclease activity	Yes
3'→5' exonuclease activity (fidelity)	No
Amplification size	< 5kb PCR
HotStart activity (chemical-mediated HotStart)	No
A-tailing	Yes
Error rate	12-13 bp error/ 10^6 bp
Expiration date (storage at -20°C)	2 years and 3 months

Recommended PCR mixture and cycling condition

PCR mixture (Reaction vol. 50 μ L)		Cycle		
10X <i>Taq</i> Reaction buffer	5 μ L	95°C	2 min	×1
25mM $MgCl_2$	3 μ L	95°C	20 sec	} ×35-40
10mM dNTP mix	1 μ L	AT	40 sec	
Forward primer (10 pmole/ μ l)	2 μ L	72°C	1 min/kb	
Reverse primer (10 pmole/ μ l)	2 μ L	72°C	5 min	×1
Template DNA (< 200ng)	- μ L			
<i>Taq</i> DNA polymerase (5 U/ μ l)	0.25 μ L			
Add D.W to	50 μ L			