# **Eco**Taq DNA Polymerase

500U, 2500U

Cat No: ET500, ET2500

**Shipping** : Ship with blue ice.

**Storage** : Store at -20°C. Avoid freeze and thaw cycles.

#### **General Information**

EcoTaq DNA Polymerase is designed for effective and fast amplification of templates up to 5 kb with high fidelity. It is a purified recombinant enzyme with  $5'\rightarrow 3'$  DNA polymerase and  $5'\rightarrow 3'$  exonuclease activity (no  $3'\rightarrow 5'$  exonuclease activity). The elongation rate of the EcoTaq DNA Polymerase is 2 kb/min. The products are a mixture of blunt ends and single base (A) 3' overhang and can be used for direct T/A cloning.

EcoTaq DNA Polymerase is supplied together with 10x Reaction Buffer. 10×PCR Buffer contains 15 mM MgCl<sub>2</sub>.

### **Applications**

High throughput PCR.
Routine PCR with high reproducibility.
T/A Cloning
RT-PCR

#### **PCR Setup**

Component	Amount
EcoTaq DNA Polymerase, 5U/μl	$0.25 \text{-} 0.5 \mu L$
10x Reaction Buffer	5 μl
Forward primer, 10 μM	2 μl
Reverse primer, 10 μM	2 μl
dNTP Mix, 10 mM each	1 μl
Template DNA	<0.5 μg
$ddH_2O$	up to 50 μl
Total	50 μl

**Important Note:** PCR reaction conditions might need optimization with additional MgCl<sub>2</sub> (not provided) depending on the primer binding properties.

## **PCR Reaction Condition**

Temperature	Time	Cycles
94°C	2 min	
94°C	30 sec	
55-65°C	30 sec	30-35
72°C	30 sec/kb	
72°C	2 min	
4°C	$\infty$	