

# EcoTaq Flash Pfu DNA Polymerase, 2U/μL

100U, 500U

Cat No: ETFP10, ETFP50

**Shipping** : Ship with blue ice.

**Storage** : Store at -20°C.

## General Information

*EcoTaq* Flash Pfu DNA Polymerase is a high-performance, high-fidelity DNA polymerase engineered for rapid and efficient PCR amplification. The enzyme possesses both 5'→3' DNA polymerase activity and 3'→5' exonuclease (proofreading) activity, ensuring high accuracy during DNA synthesis.

Compared to conventional Pfu DNA polymerases, Fast Pfu DNA Polymerase has been optimized to deliver enhanced amplification efficiency, higher yield, and significantly reduced reaction times. It overcomes the limitations of traditional Pfu enzymes, such as slow extension rates and low amplification performance, while maintaining excellent fidelity.

This enzyme is suitable for amplification of long DNA fragments and complex templates, providing robust and reliable results across a wide range of applications. PCR products generated with *EcoTaq* Flash Pfu DNA Polymerase are blunt-ended and lack 3'-A overhangs, allowing direct cloning into blunt-end vectors. For T/A cloning applications, an additional adenine residue must be added to the 3' ends of the PCR products.

*EcoTaq* Flash Pfu DNA Polymerase is ideal for applications requiring high fidelity and precision, including gene cloning, site-directed mutagenesis, SNP analysis, and other sensitive amplification workflows.

*EcoTaq* DNA Polymerase is supplied together with 2x Reaction Buffer.

## PCR Setup

Component	Amount
<i>EcoTaq</i> Flash Pfu DNA Polymerase, 2U/μl	0.5-0.75μL
2x Flash Pfu Reaction Buffer	25 μl
Forward primer, 10 μM	2 μl
Reverse primer, 10 μM	2 μl
dNTP Mix, 10 mM each	1.5-2.5 μl
Template DNA	<0.5 μg
ddH <sub>2</sub> O	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
98°C	3 min	
98°C	10-30 sec	
55-65°C	15-30 sec	30-35
72°C	15-30 sec/kb	
72°C	2 min	
4°C	∞	