



## **PRODUCT INFORMATION**

### **EZ Taq Polymerase**

#### **Product information for: 9K-005-0020**

##### **Description:**

EZ Taq polymerase is antibody mediated HotStart DNA polymerase which has high sensitivity and high specificity. It is effective in inhibition of dimer formation and amplification of Low-copy DNA. You may modify the amount of template, extension time, annealing temperature, amount of Taq DNA polymerase, the number of PCR cycle and amount of 5X Band Sharpener according to the target size, primer's T<sub>m</sub>, and the type of templates for amplification.

#### **Product contents**

<b>Contents</b>	<b>9K-005-0020</b>
EZ Taq DNA Polymerase (5 U/ul)	500 U
10X Taq Reaction Buffer (25mM MgCl <sub>2</sub> mixed)	1.2mlx 2
10mM dNTP Mix(dATP, dTTP, dGTP, dCTP)	0.4ml
5X Band Sharpener	1.2ml

#### **Features**

<b>Features</b>	<b>EZ-LongTaq</b>
Source	Thermusaquaticus
5' → 3' exonuclease activity	Yes
3' → 5' exonuclease activity (fidelity)	No
Amplification size	< 5 kb PCR
HotStart activity	Yes
A-tailing	Yes
Expiration date (storage at -20°C)	2 Years and 3 Months

#### **Recommended PCR mixture & cycling**

<b>PCR Mixture(Reacting vol. for 50 ul</b>		<b>Cycle</b>		
10XTaqReaction Buffer	5 ul			
10mM dNTPmix	1ul	95 °C	2 min	X 1
Forward Primer (10 pmole/μℓ)	2ul	95 °C	20 sec	X 1
Reverse Primer (10 pmole/μℓ)	2 ul	AT	40 sec	X 25-40
Template DNA (< 200 ng)	-	72 °C	1 min/Kb	
5X Band Sharpener	0-10ul	72 °C	5 min	
EZ Taq Polymerase (5 U/μℓ)	0.25ul	8°C	∞	
Add D.W.to	50 ul			



**5XBand Sharpener:** Improved results can be obtained by adjusting of 5X Band Sharpener if template has high G+C region or secondary structure. Please add 5X Band Sharpener to be final concentration 0.5X-2X (5-20ul for 50ul reaction) if needed.

**Example of using for 5X Band Sharpener**

Reaction vol. 50 ul

Reaction mixture (conc. of 5X Band Sharpener)	Mix I (0X)	Mix II (0.5X)	Mix III (1X)
10X Taq Reaction Buffer	5ul	5ul	5ul
10 mM dNTP mix	1ul	1ul	1ul
Forward Primer (10 pmole/ul)	2ul	2ul	2ul
Reverse Primer(10 pmole/ul)	2ul	2ul	2ul
Template DNA	-	-	-
5X Band Sharpener	0ul	5ul	10ul
EZ Taq Polymerase (5 U/ul)	0.25ul	0.25ul	0.25ul
Add D.W to	50ul	50ul	50ul