



**DONGSHENG BIOTECH**

## **TAQ POLIMERASA (HS TAQ) 1000 U, 5U/UL**



### **Description**

HSTM Taq DNA Polymerase is a thermostable recombinant DNA polymerase derived from thermophilic bacterium *Thermus aquaticus*, its molecular weight is 94 kDa. HSTM Taq DNA Polymerase can amplify DNA target up to 5 kb. The elongation velocity is 0.9~1.2kb/min. It has 5' to 3' polymerase activity but lacks of 3' to 5' exonuclease activity, which results in a 3'-dA overhangs PCR product. All components of the HSTM PCR Buffer are at optimal concentration for efficient amplification, it contributes to highly specific incorporation of primer and template.

### **Features**

Highly thermostable -have a half-life of over 40 min at 95°C incubation  
Generates 3'-dA overhangs PCR products

### **Applications**

Routine PCR  
PCR labeling  
PCR sequencing  
Generate PCR product for TA cloning



## Quality Control

The absence of endodeoxyribonucleases, exodeoxyribonucleases and ribonucleases confirmed by appropriate quality tests

Functionally tested in PCR

10x HSTM PCR Buffer with Mg<sup>2+</sup>

200 mM Tris-Cl(PH 8.8), 100 mM KCl, 16 mM MgSO<sub>4</sub>, 1% Triton-X-100.

## Storage Buffer

20 mM Tris-HCl (pH8.0), 100mM KCl, 3 mM MgCl<sub>2</sub> 1mM DTT, 0.1% NP-40 ,0.1% Tween20, 0.2mg/ml BSA, 50% (v/v) glycerol

## Definition of Activity Unit

One unit is defined as the amount of the enzyme required to catalyze the incorporation of 10 nM of dNTPs into an acid-insoluble form in 30 minutes at 70°C using hering sperm DNA as substrate.

Store all components at -20°C

## Contents

Content	P1083
HS <sup>TM</sup> Taq DNA Polymerase (5U/μl)	200 μl
10XHS <sup>TM</sup> PCR Buffer	1.25 ml x2
6X Loading Buffer	1 ml

## Note

- HSTM Taq DNA Polymerase has two concentrations with 2.5 U/μl and 5 U/μl, default package is 5 U/μl.
- 10×HSTM PCR Buffer (Mg<sup>2+</sup> Plus) can replace with 10×PCR Buffer (Mg<sup>2+</sup> free) and 25 mM MgCl<sub>2</sub>. Please choose the appropriate package for your experiment.

HS <sup>TM</sup> Taq DNA Polymerase	Catalog #	Size
	P1083	1,000 U