



Bst DNA/RNA Polymerase

User's Instruction

Description

Bst DNA/RNA Polymerase is a mixture of Bst polymerase and extremely thermostable reverse transcriptase (65°C tolerant), which is suitable for isothermal amplification reaction of RNA. It can detect low-sensitivity RNA molecules. This enzyme is recommended in isothermal amplification experiments using RNA as a template. In addition, Bst DNA/RNA Polymerase can also perform isothermal amplification of DNA templates.

Kit Contents

	1,600U
1. Bst DNA/RNA Polymerase (8U/μl)	200 μl
2. 10 × Isothermal Buffer (Mg ²⁺ free)	1 ml×2
3. 100 mM Mg ²⁺	1 ml×2

Note

- DNA/RNA isothermal amplification
- GC-rich rapid sequencing
- Rapid sequencing of micro-template DNA

Protocol

1. Set up isothermal amplification reaction as the following table (take 25 μl per well as an example):

Component	Volume
Bst DNA/RNA Polymerase (8U/μl)	0.25-1 μl
10 × Isothermal Buffer (Mg ²⁺ free)	2.5 μl
100 mM Mg ²⁺	*X μl
dNTP Mixture (10 mM each)	3.5 μl
Template (DNA/RNA)	10 ng-1 μg



**10X Primers	2.5 μ l
ddH ₂ O	Up to 25 μ l

- *The concentration of Mg²⁺ shall be 4-10 mM, and there is no Mg²⁺ in Isothermo Buffer. Usually, better result can be obtained under the condition of 6-8 mM Mg²⁺.
- **10X Primers: 16 μ M FIP/BIP, 2 μ M F3/B3, 4 μ M LoopF/B each.

2. Thermocycling Conditions

- a) 65°C for 30-60 min
- b) 85°C for 5 min (inactivation)

Storage

Minimum shelf life is 3 years at -20°C. Avoid multiple freeze-thaw cycles.