

HelixAmp™ *Bst* DNA Polymerase, LF (Ver. 3.0)

Kit Contents

HelixAmp™ <i>Bst</i> DNA Polymerase, LF (Ver. 3.0)			
Cat. No.	BST3-1600 (1,600units)	BST3-4K (4,000units)	BST3-8K (8,000units)
<i>Bst</i> DNA Polymerase, LF (Ver. 3.0) (8unit/μl)	0.2ml	0.5ml	1.0ml
10x <i>Bst</i> Buffer	0.5ml	1.25ml	1.25ml x 2ea
100mM MgSO ₄	0.4ml	1ml	1ml x 2ea
dNTP Mix (each 10mM)	1.0ml	1.25ml x 2ea	1.25ml x 4ea
Instructions for Use	1ea	1ea	1ea

Description

HelixAmp™ *Bst* DNA Polymerase, LF (Ver. 3.0) is the genetically engineered form of the *Bacillus stearothermophilus* DNA polymerase protein that has significantly improved performance. *Bst* DNA Polymerase, Large Fragment is prepared from an *E. coli* strain containing the *Bacillus stearothermophilus* DNA polymerase gene, lacking the 5' → 3' exonuclease domain.

Application

Isothermal amplification
Strand displacement amplification
DNA sequencing through high GC regions

Storage buffer

10mM Tris-HCl (pH7.5), 50mM KCl, 0.1mM EDTA,
1mM DTT, stabilizer, 50% Glycerol

Storage



Store below -20°C

Shelf life



12 months

Concentration

8unit/μl

Quality control

By Nanohelix's ISO 13485-certified quality management system, each lot of **HelixAmp™ Bst DNA Polymerase, LF (Ver. 3.0)** was tested against predetermined specifications to ensure consistent product quality.

Protocol [Typical LAMP Protocol]

1. Add following components for a single 25µl reaction.

Components	Volumes	Final Concentration
DNA Template	X µl	> 10copies/rxn
10x Bst Buffer	2.5µl	1x (contains 2mM MgSO ₄)
100mM MgSO ₄	1.5µl	6mM (total 8mM)
dNTP Mix (each 10mM)	5µl	2.0mM each
FIP/BIP Primer (25x)	1µl	1.6µM
Loop F/R Primer (25x)	1µl	0.2µM
F3/B3 Primers (25x)	1µl	0.4µM
<i>Bst</i> DNA Polymerase, LF (Ver. 3.0) (8unit/µl)	1µl	8U/rxn
RNase-free Water	Adjust to final 25µl	

2. Incubate the following reaction at 65°C for 30-60 minutes.

Products

Cat. No.	Products	Size
BST3-1600	HelixAmp™ <i>Bst</i> DNA Polymerase, LF (Ver. 3.0)	1,600units
BST3-4K	HelixAmp™ <i>Bst</i> DNA Polymerase, LF (Ver. 3.0)	4,000units
BST3-8K	HelixAmp™ <i>Bst</i> DNA Polymerase, LF (Ver. 3.0)	8,000units