

Lolina A/S



Address: Sindalsvej 30 8240 Risskov Danmark

Email: Info@lolina.dk

Website: <https://lolina.dk>

Product Specification

Product	Lolina® Lyophilized Bst Plus DNA Polymerase (60 U/μL, Glycerol-Free)
Catalog No.	NaM702002
Polymerase	Bst DNA Polymerase
Storage conditions	Store at -25 ~ -15°C, valid for 1 year. Please avoid light.
Heat Inactivation	85°C, 5 min
Unit Definition	1 unit (U) is defined as the amount of enzyme required to incorporate 10 nmol of dNTPs into acid-insoluble precipitate under the reaction conditions of 65°C for 30 minutes.
Product Applications	Isothermal amplification reaction

Product description

Lolina® Bst Plus DNA Polymerase is derived from *Bacillus stearothermophilus* DNA Polymerase I. The 5'-3' exonuclease activity was removed by genetic engineering method, but the 5'-3' DNA polymerase activity and strong chain replacement activity were retained. Compared with wild-type Bst DNA Polymerase, the polymerase showed great improvement in amplification speed, yield, salt tolerance and thermal stability, and increased dUTP tolerance. It was very suitable for isothermal amplification reactions such as LAMP reaction. This product freeze-dried glycerin-free Bst Plus DNA Polymerase to solve the problem of glycerinase-free instability and could be used to make freeze-dried products.

Components

Comp. No.	Comp. Name	Size		
		12 KU	120 KU	1,200 KU
NaM702002- A	Lyophilized Bst Plus DNA Polymerase (60 U/μL, Glycerol-Free)	1 Vial (200 μL)	5 Vials (400 μL)	10 Vials (2 mL)
NaM702002- B	Lyophilized monoenzyme redissolution solution	200 μL	2 mL	20 mL

Instructions

1. Reaction System

Components	Volume (μL)	Final Concentration
2.5x pH Sensitive Reaction Buffer	10	1 x
1M MgSO ₄	0.2	
25 mM d(AUCG)TP	1.4	
UDGase (Glycerol-free)	0.005	
Reverse Transcriptase (Glycerol-free)	0.075	
Lyophilized Bst Plus DNA Polymerase	2	
RNase Inhibitor (Glycerol-free)	0.2	-
10x Primers	2.5	1x
Template	x	-
ddH ₂ O	Up to 25	-

[Note]:

- The recommended concentration of 25 mmol/L d(A/U/G/C)TP mix was 1.2 – 1.4mmol/L
- 10 × Primers: 16 $\mu\text{mol/L}$ FIP/BIP, 2 $\mu\text{mol/L}$ F3/B3, 4 $\mu\text{mol/L}$ Loop F/B each. The ratio of primers also could be adjusted appropriately.

2. Reaction System

The reaction was incubated at 65°C for 30 – 60 min. Heat inactivation was carried at 85°C for 5 min. If UDG was used in the reaction system, the UDG digestion reaction should be proceeded (such as incubation at 25°C for 10 min).

Notes

- This product is for research use only.
- For your safety and health, please wear a lab coat and disposable gloves during operation.