Gloria Nova HS 2X PCR Mix for NGS

WEB: www.abclonal.com

Catalog No.: RK20716

Size: 25 RXN (50 μL/RXN)

Component:

Gloria Nova HS 2X PCR Mix for NGS	RM20386

Introduction

Gloria Nova HS DNA polymerase is a typical B-family polymerase with a unique structure. It is a new enzyme similar to *Pyrococcus furiosus*, fused with a continuous synthesis enhancement domain, which improves elongation, yield and specificity.

Gloria Nova HS DNA polymerase is equipped with specific antibodies, which effectively inhibits non-specific amplification and improves the stability of Gloria Nova HS DNA polymerase.

Gloria Nova HS DNA polymerase has 5'-3' continuous synthesis activity and 3'-5' exonuclease activity, and its amplified products are blunt-ended.

Gloria Nova DNA polymerase is a mutant polymerase modified by genetic engineering. It has the ability to incorporate dUTP and can also amplify complex templates with dU.

Gloria Nova HS 2X PCR Mix for NGS is an easy-to-operate 2X Mix, which contains Gloria Nova HS DNA polymerase, buffer, Mg+ and dNTPs, etc. Only additional DNA template, primers and water are needed in the amplification system. Perform amplification.

All batches of Gloria Nova HS 2X PCR Mix for NGS have undergone strict quality control to ensure the stable performance of each batch of reagents.。

Storage： -20℃

Instructions

Notice：

- It is recommended to prepare all reaction components on ice, because the 3'-5' exonuclease activity of Gloria Nova HS DNA polymerase at room temperature will cause primer degradation;
- All components should be mixed well and centrifuged instantaneously before use;
- For other library preparation steps or systems, please refer to the ABclonal library preparation instructions;
- The polymerase is specially developed for the NGS library preparation and amplification system.
- For cloning and other aspects of amplification, please select other molecular amplification enzymes;

Recommended PCR reaction:

50 μL reaction system as an example:

Component	50 μL
Gloria Nova HS 2XPCR Mix for NGS	25 μL
DNA module*	Variable
Forward primer (20 μM)**	2.5 μL
Reverse primer (20 μM) **	2.5 μL
Nuclease-free Water	to 50 μL

***The DNA template refers to the purified product of the linker connected to the magnetic beads during the library construction process.**

****The primers are the library primers used in the process of NGS library construction.**

Recommended reaction procedure:

Step	Temperature	Time	Number of cycles
Pre denaturation	98°C	45 s	1
Denaturation	98°C	15 s	Recommended number of cycles based on input
Annealing	60°C	30 s	
Extend	72°C	30 s	
Hold	72°C 4~10°C	1 min ∞	1

Recommended number of cycles based on input：

Input DNA（fragmented DNA）	Number of PCR cycles
1ng	13-15
10ng	9-11
25ng	7-9
50ng	6-7
100ng	5-6
250ng	4-5
500ng	3-4
1000ng	2-3