

xLiBPreP™ Universal HIFI Amplification KIT (for illumina)

Component

CatLog: HC011 Specification: 24rxns / 96 rxns

Component	24 rxns (HC011-024)	96 rxns (HC011-096)
● 2×HiFi Master Mix	600 μL	2.4 mL

Storage and Delivery

-30 ~ -15 °C storage, ≤ 0 °C Delivery.

Introduction

xLiBPreP™ Universal HIFI Amplification Kit is suitable for PCR amplification reactions of DNA library for illumina sequencing platform, it has the advantages of high fidelity and no base bias, and can realize highly uniformity library amplification, which significantly improves the sequencing quality of library. The product has undergone strict quality control and performance verification to maximize the stability and reproducibility of library construction.

Scope of application

This product is only suitable for second generation sequencing DNA library construction and hybridization library amplification, please do not use it for other amplification experiments.

Notice

! Be sure to read this precaution before using this kit.

1. Before starting the experiment, please clean the operating table to ensure that there is no nuclease and DNA contamination.
2. Use nuclease-free pipette tips and centrifuge tubes for the experiment.
3. Before amplification, make sure the PCR instrument has been adjusted and is in a stable state.
4. Avoid cross contamination between nucleic acid samples and products during the operation.
5. For special DNA library, such as low-quality library and long fragment library, adjust the annealing temperature, extension time and the number of amplification cycles according to the instructions in the reaction program to obtain the best amplification effect.

1.1 Operation Step

1.1.1 Dissolve all components on ice or at 4°C, mix briefly, perform subsequent operations on ice, and store at -20°C after use.

Component	Volume (μL)
DNA templates*	20
● 2× HiFi Master Mix	25
○ PCR Primer Mix **	5
Total Volume	50

⤴ * The DNA template here refers to DNA purified from magnetic beads.

⤴ ** The primers here belong to the library primers used in illumina sequencing platform, for non-illumina sequencing platform, you need to replace the library amplification primers according to the sequencing platform.

1.1.2 Set up the PCR instrument reaction program according to the table below, with the hot lid temperature set at 105 °C.

Step	Temp (°C)	Duration	Cycles
Initial denaturation	98	1 min	1
Denaturation	98	10 sec	6 ~ 17 *
Annealing*	60	30 sec	
Extension	72	30 sec	
Final extension	72	5 min	1
Hold	4	∞	1

⤴ * Optimization of the annealing temperature may be required for nonstandard (i.e., other than Illumina TruSeq) adapter/primer combinations.

⤴ * PCR Cycles Reference :

DNA template INPUT(ng)	PCR Recommend Cycles
1	15 ~ 17
10	12 ~ 14
25	10 ~ 11
50	9 ~ 10
100	7 ~ 9
200	6 ~ 8