NGS Multiplex Oligos for MGI (Index Primer Mix Set Ⅲ)

Second generation sequencing multi-sample junction primer kit

III

(MGI Platform Index Primer 97-128)

Catalog number: N666024 (64 rxns)

Storage condition: -20℃ for storage, ice pack for transportation.

Products content

Component	64 rxns
Adaptor for MGI	320 μl
Index primer Mix (97-128) for MGI	32 x 12 μll

Products Introduction

This kit provides the Adaptor and Index primer Mix for MGI platform second generation sequencing, which is specially designed for MGI sequencing platform, the Adaptor is improved on the basis of the original MGI platform, the improved Adaptor is a universal type without Barcode sequence, which is convenient for automation, and it contains Universal primer and Index primer binding site, which is introduced into Barcode sequence by Index primer. It contains Universal primer and Index primer binding site, and the Barcode sequence is introduced by Index primer. The improved connector can significantly improve the library ligation efficiency, transformation efficiency and amplification efficiency. There are three sets of this kit, namely: Second Generation Sequencing Multi-sample Junction Primer Kit I (Barcode 1-48 of MGI platform), Second Generation Sequencing Multi-sample Junction Primer Kit II (Barcode 49-96 of MGI platform), and Second Generation Sequencing Multi-sample Junction Primer Kit III (Barcode 97-128 of MGI platform). These libraries cover Barcode 1-128 of MGI sequencing platform. The prepared libraries can be used for sequencing on BGISEQ-500RS (PE50/PE100/PE150), MGISEQ-2000RS (PE100/PE150), MGISEQ-200RS (PE100) and other sequencers of MGI platform.

Provide your own instruments, reagents and consumables

1. Magnetic frame: DynaMagTM-2 is recommended.
2. DNA Purification and Recovery Kit: We recommend the use of the Kangwei Magnetic Bead Method DNA Purification and Recovery Kit.
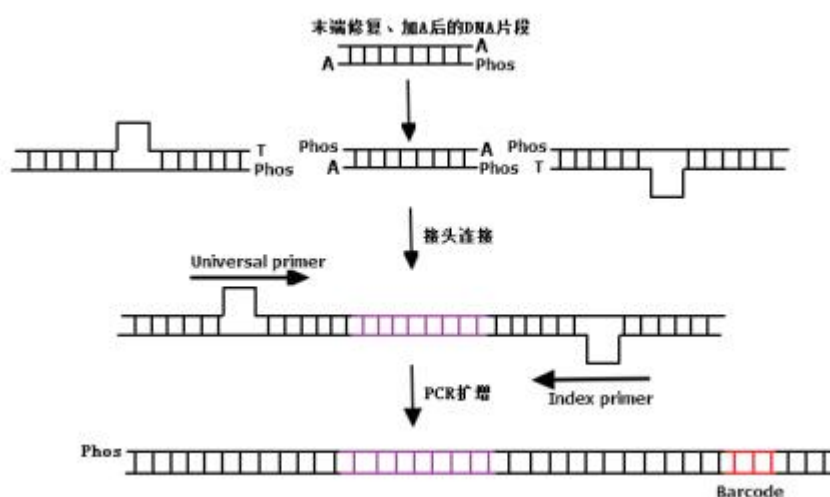
DNA Library Building Kit: Kangwei cfDNA Library Rapid Preparation Kit (MGI platform), DNA Library Rapid Preparation Kit, Second Generation Sequencing with Fragmentation Enzyme Rapid DNA Library Building Kit is recommended.

3．Anhydrous ethanol.

4．Reaction Tubes: It is recommended to use PCR tubes with low adsorption and 1.5 ml centrifuge tubes; Tips: It is recommended to use high-quality filter tips to prevent contamination of kits and libraries.

Pre-experiment Preparation and Important Notes

1.Adaptor is a double-chain structure, please do not leave it above room temperature to avoid unchaining and affecting the use.

2．Please centrifuge the Index primer Mix briefly before uncapping so that the liquid collects at the bottom of the tube to avoid cross-contamination between different primers.

workflow

procedure

The second-generation sequencing multi-sample junction primer kit II was used according to the DNA Library Rapid Preparation Kit (MGI platform) protocol.

Index primer Mix is composed of Universal primer and Index primer, of which there are 32 Index primers. According to different mixing strategies, different Indexes can be added to each sample, or one set of Indexes can be added to each sample, and the final mixed library is required to ensure that all Indexes are assembled in a set. 8 of Indexes 97-128 are in a set, which are 97-104, 105-112, 113-120 and 121-128 respectively.

Table: Barcode 97-128 for MGI

Barcode 97	AGGTATTCTT	Barcode 106	ACCAGCGTCA
Barcode 98	CGAATGCAAC	Barcode 107	CGTCAGGCTC
Barcode 99	TTCAACGGCG	Barcode 108	CCTGCTCTAG
Barcode 100	CTCGGCGGAA	Barcode 109	TAACTCAACT

Barcode 101	ACGGTAATGG	Barcode 110	TAGTGACCGC
Barcode 102	GATCCGACGT	Barcode 111	GTGGAGTGAA
Barcode 103	TCACGATACA	Barcode 112	GTCTCATGGT
Barcode 104	GATTCTCTTC	Barcode 113	GAACAACCTA
Barcode 105	AGAATTAATG	Barcode 114	CCAGAGTCAG

Barcode 115	AACAGGCAGT	Barcode 122	GGAAGTGGCA
Barcode 116	GCTCCATGAC	Barcode 123	AACATTCTAC
Barcode 117	ATGTCTATCC	Barcode 124	GACGCGAGTC
Barcode 118	CTTGTCGAGG	Barcode 125	CTATAACACT
Barcode 119	TGCTTCGGTA	Barcode 126	AGTCTCGTGT
Barcode 120	TGGAGTATCT	Barcode 127	TCGGCCTATG
Barcode 121	CCTTGATCAA	Barcode 128	TTGCAGACGG