

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

Second Generation Sequencing Multi-Sample Junction Primer Kit

I

(MGI Platform Index Primer 1-48)

Catalog number: N666006 (96 rxns)

Storage Condition: -20°C, transported in ice packs.

Products content

Component	96 rxns
Adaptor for MGI	480 µl
Index primer Mix (1-48) for MGI	48×12 µl

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 the 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

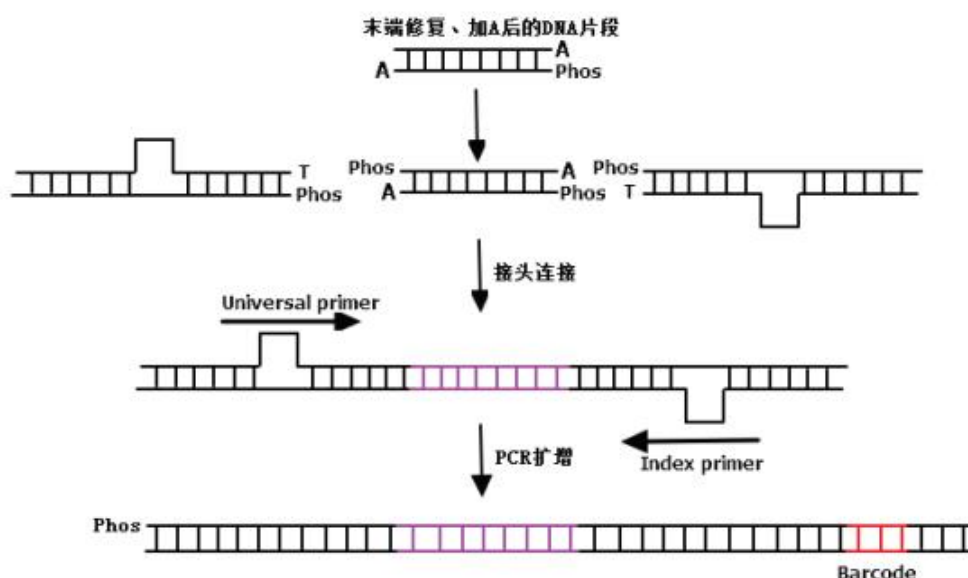
1. Magnetic frame: DynaMag™-2 is recommended.
2. DNA purification and recovery kit: We recommend using Kangwei DNA purification and recovery kit by magnetic bead method.
3. DNA Library Building Kit: We recommend using Kangwei cfDNA Library Rapid Preparation Kit (MGI platform), DNA Library Rapid Preparation Kit, Second Generation Sequencing with Fragmentation Enzyme Rapid DNA Library Building Kit.
4. Anhydrous ethanol.

5. Reaction Tubes: It is recommended to use low adsorption PCR tubes and 1.5 ml centrifuge tubes; Tips: It is recommended to use high-quality filtration tips to prevent contamination of kits and library samples.

Preparation for the experiment and important notes

1. Adaptor is a double-chain structure, please do not leave it above room temperature to avoid unraveling 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 I 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 48 kinds of Index primer. According to different mixing strategies, different Indexes can be added to each sample, or a set of Indexes can be added to one sample, and the final mixed library is required to ensure that all Indexes are assembled in a set. 4 of Indexes 1-16 are in a set, and there are 4 sets in total, which are 1-4, 5-8, 9-12, and 13-16, respectively. 8 of Indexes 17-48 are in a set, and there are 4 sets in total, which are 17-24, 25-32, 33-40, and 41-48, respectively. In Index 17-48, 8 are a set and there are 4 sets, 17-24, 25-32, 33-40 and 41-48 respectively.

Table: Barcode 1-48 for MGI

Barcode 1	TAGGTCCGAT	Barcode 10	AGGAAGATAG
Barcode 2	GGACGGAATC	Barcode 11	GCTCTTGCTT
Barcode 3	CTTACTGCCG	Barcode 12	CAAGCACGCA

Barcode 4	ACCTAATTGA	Barcode 13	CGGCAATCCG
Barcode 5	TTCGTATCCG	Barcode 14	ATCAGGATTC
Barcode 6	GGTAACGAGC	Barcode 15	TCATTCCAGA
Barcode 7	CAACGTATAA	Barcode 16	GATGCTGGAT
Barcode 8	ACGTCGCGTT	Barcode 17	GTGAGTGATG
Barcode 9	TTCTGCTAGC	Barcode 18	GAGTCAGCTG

Barcode 19	TGTCTGCGAA	Barcode 34	TAATCGTTCA
Barcode 20	ATTGGTACAA	Barcode 35	GTTCGCTCTA
Barcode 21	CGATTGTGGT	Barcode 36	TCTCACACAT
Barcode 22	ACAGACTTCC	Barcode 37	CTGTTAGGAT
Barcode 23	TCCCACTCT	Barcode 38	CGCAGACGCG
Barcode 24	CACCACAAGC	Barcode 39	AAGGATCATC
Barcode 25	TAGAGGACAA	Barcode 40	AGCGTTGAGC
Barcode 26	CCTAGCGAAT	Barcode 41	TTAGATGCAT
Barcode 27	GTAGTCATCG	Barcode 42	GTCCAGAGCT
Barcode 28	GCTGAGCTGT	Barcode 43	CACGTGATAG
Barcode 29	AACCTAGATA	Barcode 44	CCACTAGTCC
Barcode 30	TTGCCATCTC	Barcode 45	TGGACTTGGC
Barcode 31	AGATCTTGCG	Barcode 46	GCTTGACAGG
Barcode 32	CGCTATCGGC	Barcode 47	AAGACCTCTA
Barcode 33	GCAACGATGG	Barcode 48	AGTTGCCATA