


# MGI Low Throughput Automated Solution

## WGS Sample Preparation

### Introduction

MGIEasy DNA Library Prep Kit is a WGS library construction kit tailored to MGI high-throughput sequencing platform. Using this kit, the whole-genome DNA can be prepared into a single-stranded circular DNA library, which dedicated to the MGI high-throughput sequencing platform.

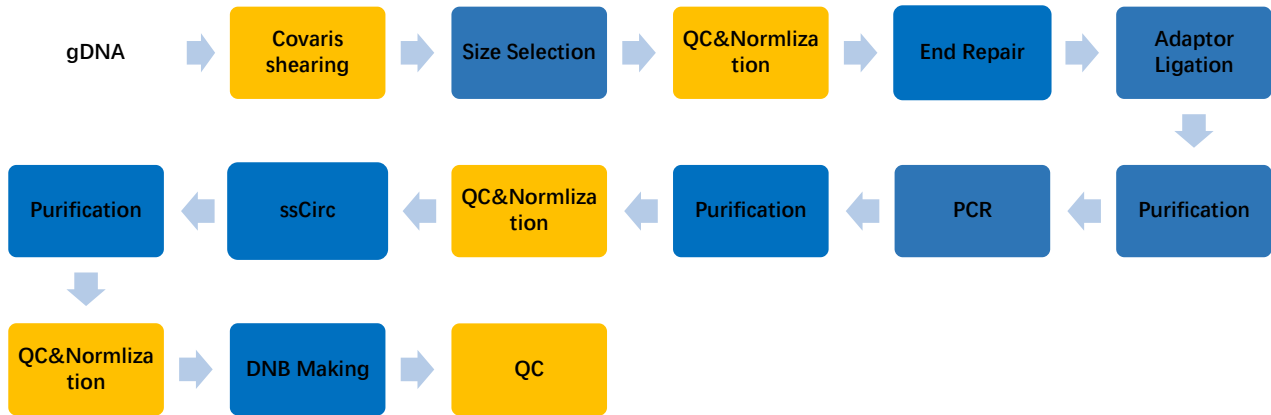
<b>Comprehensive functions</b>	<b>Cost effectivity</b>	 <p><b>Automated Sample Preparation System</b>        —Designed for Next Generation Sequencing Applications</p>
<p>Integrated design comprising functional modules including PCR preset protocols, temperature control, etc. covering the whole testing process.</p>	<p>Short time to set up the library, batched sample processing, suitable for small to medium laboratories.</p>	
<b>Professional and minimal contamination</b>	<b>Flexible platform</b>	
<p>Including a laminar flow hood which eliminates external contaminants to maximize accurate results.</p>	<p>Allows customized workflow development; high expandability.</p>	

MGISP-100 is an automated system focused on the field of sample preparation for the next generation sequencing. The automatic process can be edited for different needs. MGISP-100 can save a great deal of effort, improve the stability of the preparation of NGS library, reduce the cost. Currently, it has been operated stably for MGI sequencer's library preparation.

The throughput for [MGIEasy DNA Library Prep Kit] based on MGISP-100 is 16 rxn /run. MGISP-100 can do Fragmentation, Size Selection, End Repair, Adaptor Ligation, PCR Amplification, Purification, ssCirc, and DNB Preparation and more.

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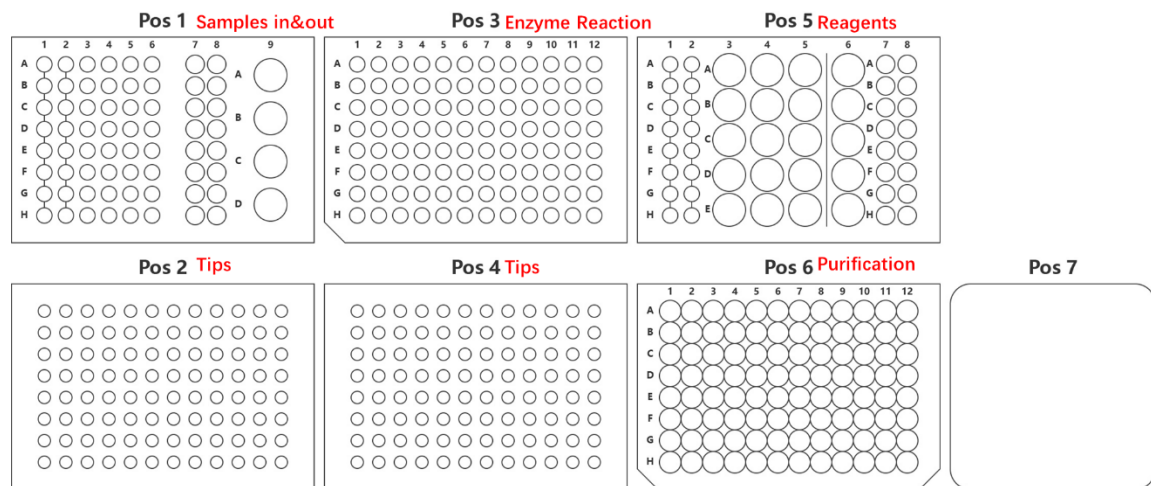
## Workflow on MGISP-100



Can be done on MGISP-100

Can not be done on MGISP-100

## MGISP-100 Board Layout



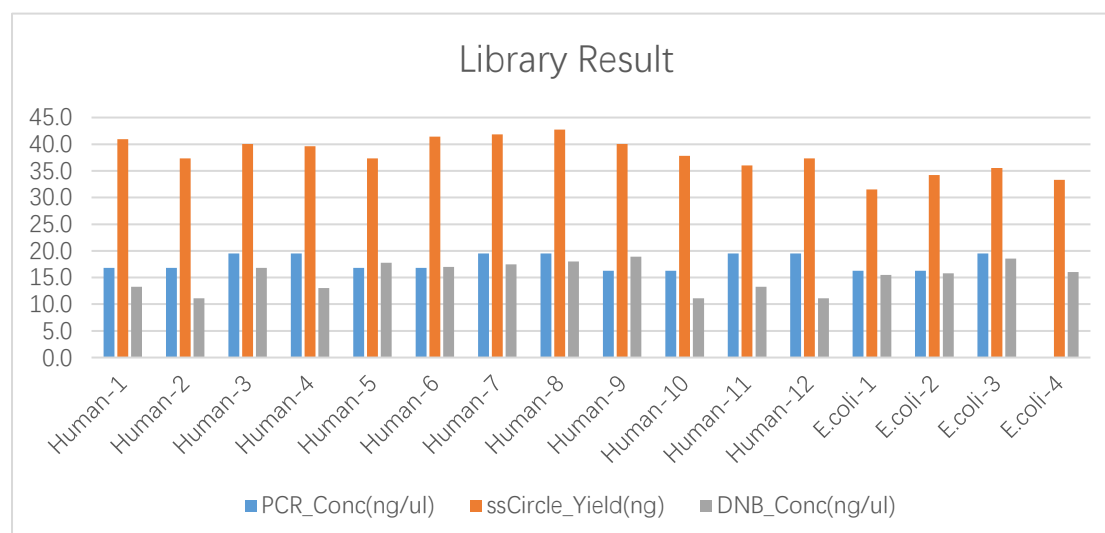
## Four steps on MGISP-100 for WGS sample preparation

<b>MGISP-100 Running Time</b>	gDNA → Fragment DNA:	≤40 minutes
	Fragment DNA → PCR:	≤4 h
	PCR → ssCirc:	≤2 h
	ssCirc → DNB:	≤40minutes
<b>Throughput per Run</b>	16 samples	
<b>Matching Kit</b>	[MGIEasy DNA Library Prep Kit ]	

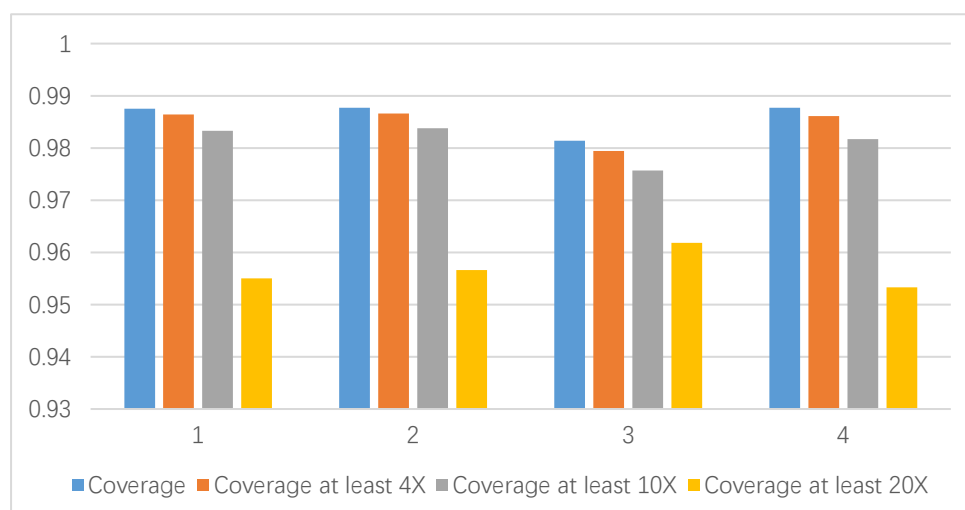
## MGISP-100 Data Performance

### Stable and Effective Results from Various Sample Types

Libraries were prepared from human and E.coli using MGISP-100. The yields of PCR product, ssCirc, DNB are qualified and stable. It shows that MGISP-100 has a stable effect on gDNA samples of both human and microbe.



### High Genome Coverage



1/2/3/4 are the same human sample made on MGISP-100; the data is from MGISEQ platform

## MGISP-100 Ordering Information

Model	Item NO.
MGISP-100	900-000027-00
MGISP-100RS	900-000070-00
MGISP-100CX	900-000052-00
MGISP-100RX	900-000051-00

## Consumables Ordering Information

Product Name	Brand	Specification	Unit	Item NO.
0.5ml SC Micro Tube PCR-PT	MGI	100 ea./bag	bag	1000001558
Break-Away 96-Wells, clear tubes, purple frame	MGI	10 pieces/box	box	1000004341
Strips of 8 flat optical caps	MGI	12 ea./bag	bag	1000004191
Microseal 'P' Replacement Pads	MGI	10 pieces/bag	bag	1000002039
250ul Automated Tips, Filter, sterile, Low adsorption	MGI	10 boxes/case	case	1000008530
1.3ml U-bottom Deepwell Plate	MGI	2 pieces/bag	bag	1000004644
Hard-Shell Thin-Wall 96-Well Skirted PCR Plates, white shell/clear well	MGI	10pieces/bag	bag	1000000675
2ml SC Micro Tube PCR-PT	MGI	100 ea./bag	bag	1000001553

## Kit Ordering Information

Product Name	Specification	Item NO.
<b>MGIEasy DNA Library Prep Kit</b>	16RXN	1000002505
<b>BGISEQ-500RS High-Throughput Sequencing Set</b>	SE50/PE50/PE100	1000002072/1000005475/1000005478
<b>MGISEQ-2000RS High-Throughput Sequencing Set</b>	SE50/PE100/PE150	1000003703/1000002873/1000003981
<b>MGISEQ-200RS High-Throughput Sequencing Set</b>	SE50/PE50/PE100	1000004635/1000005228/1000005229

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