

MGI Low Throughput Automated Solution

Single Cell Chromosome Copy Number Variation Test

Introduction

The MGICare Detection Kit for Single Cell Chromosome Copy Number Variation Test is a kit for detecting single-cell chromosome copy number variation tailored to MGI sequencing platform. The kit can be used to manipulate human single-cell or micro-cells (such as in vitro fertilization-embryo transplanted human embryonic cells, human peripheral blood lymphocytes, etc.) to prepare single-stranded circular DNA compatible with MGI sequencing platform.

Comprehensive functions

Integrated design comprising functional modules including PCR preset protocols, temperature control, etc. covering the whole testing process.

Cost effectivity

Short time to set up the library, batched sample processing, suitable for small to medium laboratories.

Professional and minimal contamination

Including a laminar flow hood which eliminates external contaminants to maximize accurate results.

Flexible platform

Allows customized workflow development; high expandability.



Automated Sample Preparation System

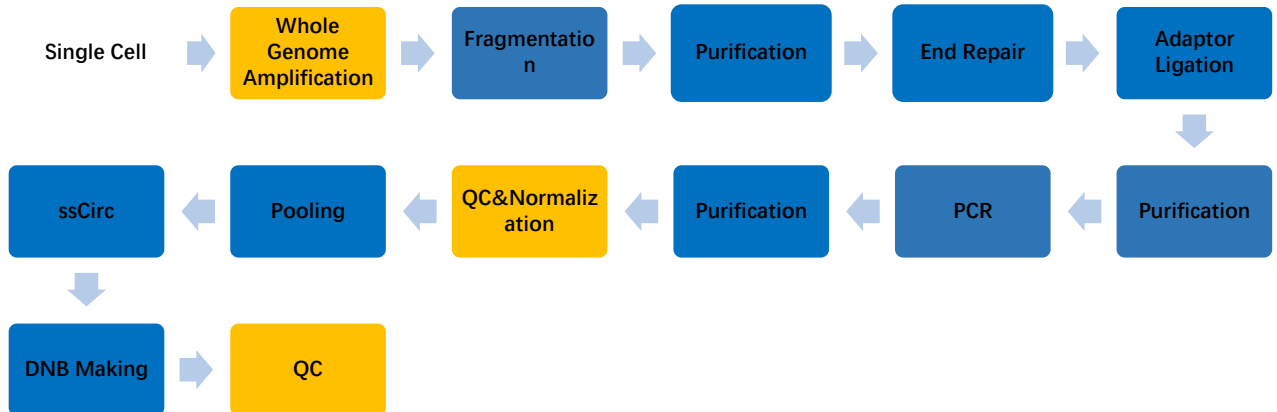
—Designed for Next Generation Sequencing Applications

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 [MGICare Detection Kit for Single Cell Chromosome Copy Number Variation Test] based on MGISP-100 can be set 16 rxn/run. MGISP-100 can do Fragmentation, End Repair, Adaptor Ligation, PCR Amplification, Purification, Pooling, DNB making and more.

Automated Solution

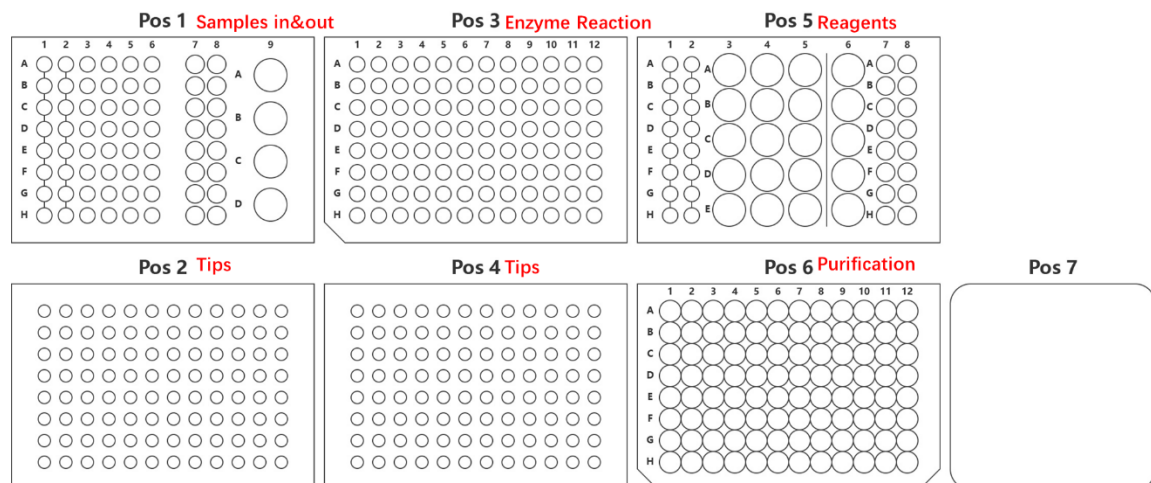
Workflow on MGISP-100



Can be done on MGISP-100

Cannot be done on MGISP-100

MGISP-100 Board Layout



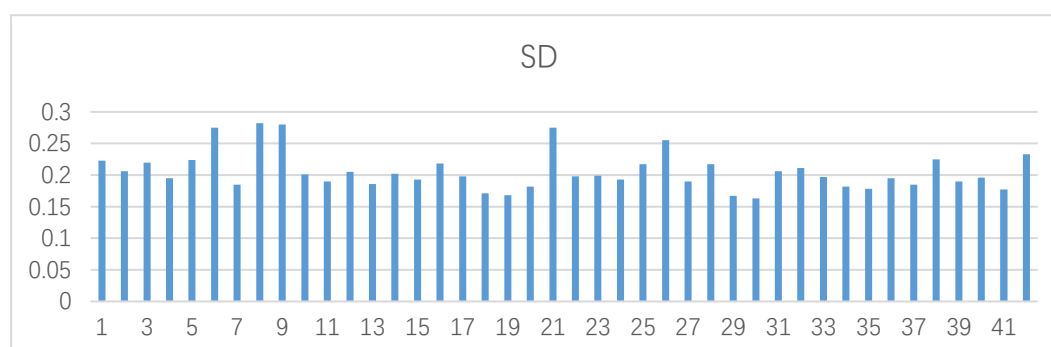
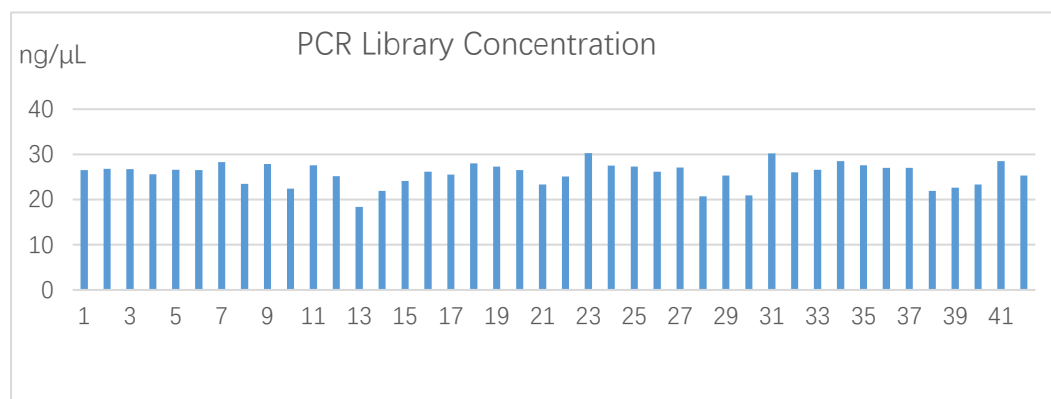
Two steps on MGISP-100 for MGICare Detection Kit for Single Cell CNV

Variation Test sample preparation

MGISP-100 running time	gDNA → PCR :	≤4h
	PCR → DNB :	≤2h
Throughput per run	16 samples	
Matching kit	[MGICare Detection Kit for Single Cell Chromosome Copy Number Variation Test]	

MGISP-100 Data Performance

Stable and Effective Library Results and Sequencing Results from manual made standard samples.



Accurate test results

Testing different manual-made samples and clinical samples, the detection results of the MGISP-100 are consistent with the standard karyotype.

	Condition	Result
Sample 1	standard karyotype	47,XX,+21
	MGISP-100	47,XX,+21(1.42)
Sample 2	standard karyotype	47,XY,+X
	MGISP-100	47,XY,+X(2.16)
Sample 3	standard karyotype	46,XY, dup(11p15.5-p14.3,21.827M),del(11p14.3-p13,11.501M)
	MGISP-100	46,XY, dup(11p15.5-p14.3,22.00M,1.278);del(11p14.3-p13,11.33M,0.829);
Sample 4	standard karyotype	46,XY,dup(17q24.2-q25.3,16.508M)
	MGISP-100	47,XY, dup(17q24.2-q25.3,16.48M,1.455);

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.
MGICare Detection Kit for Single Cell Chromosome Copy Number Variation Test	48RXN	1000005291
MGIEasy Rapid Circularization Module	16RXN	1000005258
BGISEQ-500RS High-Throughput Sequencing Set	SE50/PE50/PE100	1000002072/1000005475/1000005478
MGISEQ-2000RS High-Throughput Sequencing Set	SE50/PE100/PE150	1000003703/1000002873/1000003981
MGISEQ-200RS High-Throughput Sequencing Set	SE50/PE50/PE100	1000004635/1000005228/1000005229

*For Research Use Only.

■ Contact Us

MGI Tech Co., Ltd
 Add.: Building11, Beishan Industrial Zone,
 Yantian District, Shenzhen, CHINA 518083
 Email: MGI-service@genomics.cn
 Website: en.migtech.cn
 Tel: 4000-966-988
 Revision: 2018.10



<https://www.linkedin.com/company/mgi-bgi>



@MGL_BGI

