

MGISP-100 Library Preparation Platform

App-A+Make DNB Automated Library Conversion



More Sequencing Options For Linear Library Users

Versatility & Stability

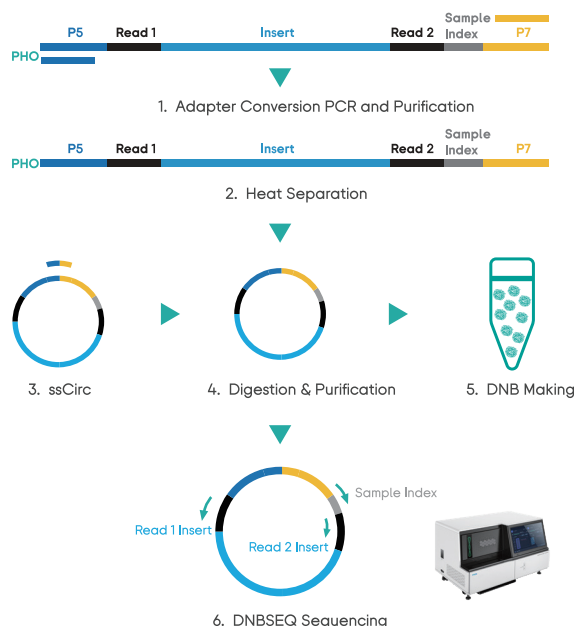
Linear libraries were lossless converted into single-stranded circular DNA libraries in batches

Efficiency & Compatibility

Automated preparation of DNA nanoballs, compatible with DNBSEQ™ platform sequencing

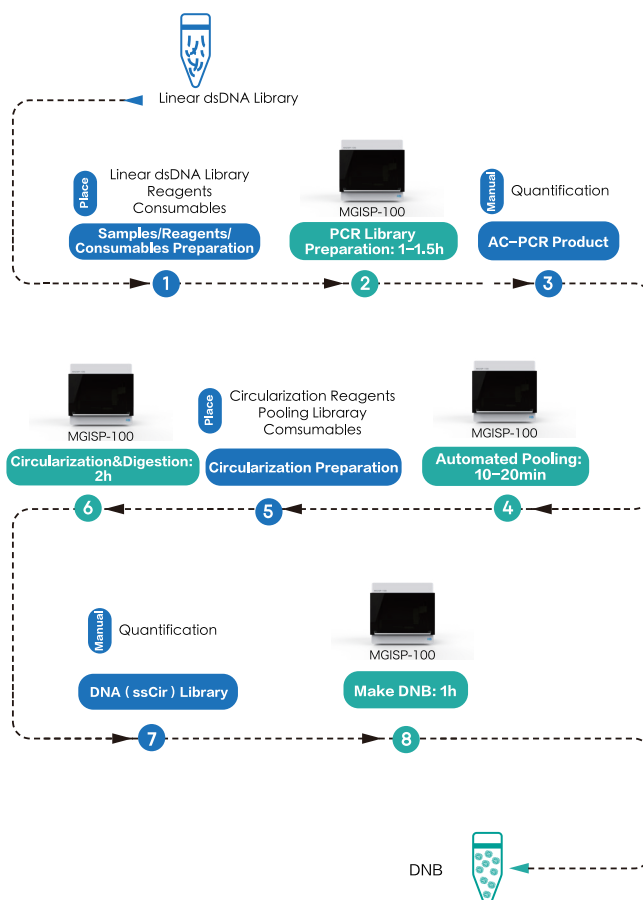
Principle of Library Conversion

The library products constructed by third-party library preparation kits are generally linear double-stranded DNA, and the library conversion kit (MGIEasy Universal Library Conversion Kit (App-A), PN: 1000004155) is used to convert the linear dsDNA library into a single-stranded circular DNA library compatible with the MGI sequencing platform.



Automated Operation Process

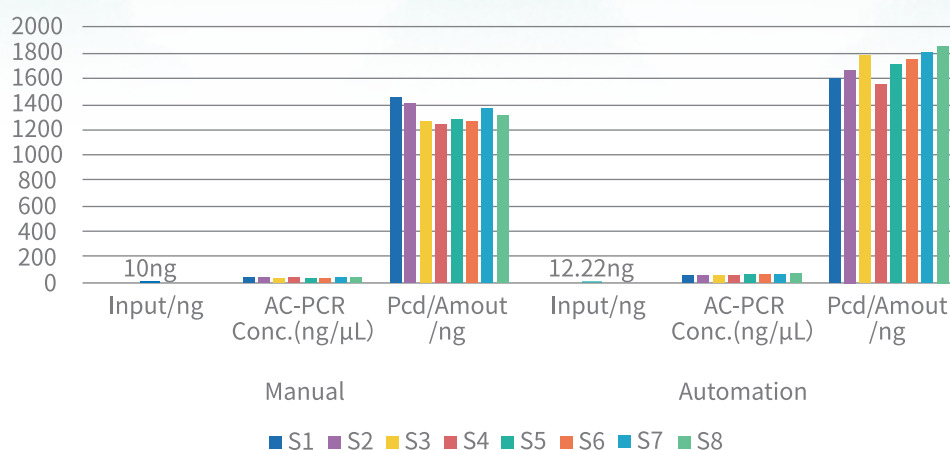
App-a +Make DNB was run on MGISP-100 for automated library conversion, which mainly went through four steps: PCR library preparation - automated pooling - circularization & digestion - make DNB. A maximum of 16 samples could be run at one time. The whole process was highly automated, and the operation only took about 4.5-5 hours.



Data Performance

The MGISP-100 DNA Sequencing Library Preparation System performed the same as or better than manual in terms of AC-PCR products and the total amount of libraries produced.

Manual vs Automated Library Preparation
Data performance of App-A library conversion based on MGISP-100



Ordering Information

Instruments

Item NO.	Product Name	Specification
900-000070-00	DNA Sequencing Library Preparation System MGISP-100RS	EA, CE RUO
900-000027-00	DNA Sequencing Library Preparation System MGISP-100	EA, CE IVD

Reagents

Product No.	Product Name	Product Introduction	Sequencing Platform
1000004155	MGEasy Universal Library Conversion Kit (App-A)	Used to convert linear double-stranded DNA into single-stranded circular DNA	DNBSEQ-G50/ DNBSEQ-G400/ DNBSEQ-T7
1000020835	High-Throughput Single-End Sequencing Primer Kit (App-A)	Used to replace the sequencing primers under SE single-barcode sequencing conditions for Truseq library	
1000020832	High-Throughput Pair-End Sequencing Primer Kit (App-A)	Used to replace the sequencing primers under PE single-barcode sequencing conditions for Truseq library	
1000014047	High-Throughput Barcode Primer 3 Reagent Kit (App-A)	It contains only one barcode primer, which needs to be used together with 1000020832 to realize PE dual barcode sequencing of Truseq library	
1000027472	High-Throughput Sequencing Primer Kit (App-C)	Contains Truseq and Nextera library adapters, which can achieve any or both of the above library pooling sequencing	DNBSEQ-G50/ DNBSEQ-G400
1000028550	High-Throughput Sequencing Primer Kit (App-D)	Contains Truseq/Nextera and MGI library adapters, which can achieve any one, two or three library pooling sequencing	DNBSEQ-T7

