

DeepChek® Solution for Next Generation Sequencing (NGS)

Comprehensive Enzymatic-Based DNA Library Preparation Kits for a Large Variety of NGS Platforms

RNA / DNA extraction

PCR

Library Preparation Libraries Purification

NGS Sequencing



iSeq-100



MiniSeq



MiSeq



NextSeq



NextSeq 550



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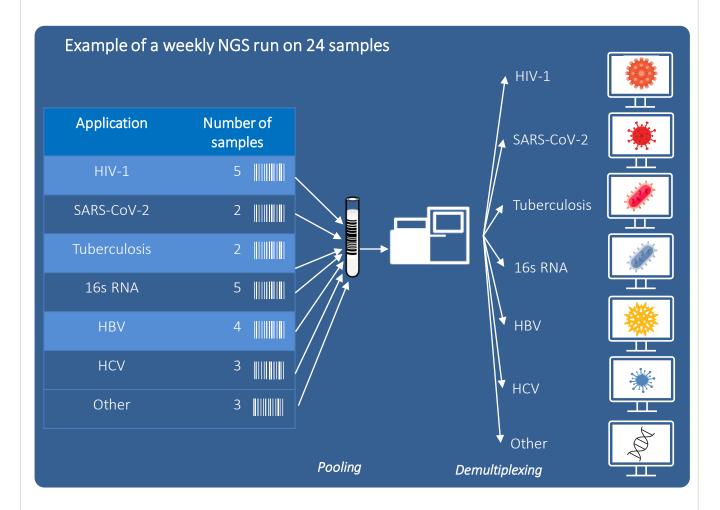
DeepChek® NGS LIBRARY PREPARATION V2 Product Highlights

| Type in DNA input | Small Genomes, PCR Amplicons, and Plasmids One library prep kit for many applications | | | | |
|-----------------------|---|--|--|--|--|
| Validated Samples | FFPE, plasma, whole blood, sputum, stools, solid & liquid culture | | | | |
| Species Category | Any Species, Fungal, Yeast, Drosophila, Zebrafish, Nematode, Plant, Mammalian, Bacteria, Rat, Mouse, Virus, Human | | | | |
| Assay Time | ~5.5 hours from DNA extraction to normalized library. (Library prep time: ~90 minutes). | | | | |
| Hands-On Time | 20 minutes | | | | |
| Mechanism of Action | Enzymatic fragmentation | | | | |
| Multiplexing | Up to 384 uniquely indexed samples may be pooled and sequenced together Available formats: 24rx/run, 48rx/run, 96rx/run, 384rx/run | | | | |
| Input Quantity | 100 pg to 1 μg | | | | |
| Species Details | Compatible with any species | | | | |
| Target Insert Size | 200 bp-1.5 kb | | | | |
| Method | 16s rRNA Sequencing, 18s rRNA Sequencing, Amplicon Sequencing, De Novo Sequencing, Whole-Genome Sequencing | | | | |
| Variant Class | Single Nucleotide Polymorphisms (SNPs), Structural Variants | | | | |
| Automation Capability | Liquid Handling Robots | | | | |
| System Compatibility | iSeq 100, MiniSeq, MiSeq, MiSeq Dx, NextSeq 550, | | | | |
| Nucleic Acid Type | DNA | | | | |
| Technology | Sequencing | | | | |
| | | | | | |

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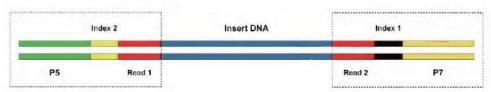
DeepChek® NGS LIBRARY PREPARATION V2 Flexible Pooling & Multiplexing

- The DeepChek® assays & software can be used through NGS on a large variety of microbiology applications simultaneously, providing high efficiency
 - Optimize NGS sequencing costs
 - Optimize turnaround time
 - Bring NGS capacity to any lab settings
- Pick your applications from a wide catalog of applications and customize your NGS panel/run for your needs

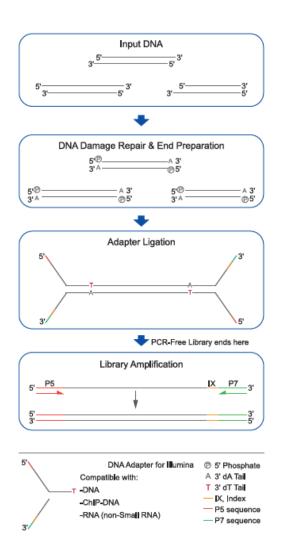


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DeepChek® NGS LIBRARY PREPARATION V2 Workflow



Construction of 2 -ended index library for Illumina



- DeepChek® NGS LIBRARY PREPARATION V2 is a DNA library preparation kit specifically developed for Illumina high-throughput sequencing platform.
- In this kit, DNA fragmentation, end repair and datailing are combined into one step, and without purification, the products are directly subject to adapter connection, library enrichment and sorting.
- 100 pg to 1 μg of template DNA can be converted into a library specific for Illumina high-throughput sequencing platform.
- Without mechanical interruption to the genome, the library preparation process is simplified, and the operation time is shortened, so it is suitable for the preparation of PCR and PCR-free libraries.
- This kit can be perfectly compatible with DNA from different sources and with different inputs, and it is only needed to adjust the fragmentation time according to the target insert fragment size to obtain a library of required fragment size.
- All the reagents provided in the kit have undergone rigorous quality control and functional testing, to ensure the optimal stability and repeatability of library preparation.

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DeepChek® NGS LIBRARY PREPARATION V2 **Metrics**



Product compatibility:

- For different initial inputs, this assay has the same distribution range within the same fragmentation time, with uniform peak pattern and a wide compatible input Sequencing data quality: range (100 pg $-1 \mu g$).
- Extensive compatibility of species and template types.
- Good compatibility of FFPE specimens of different quality levels, plasma, whole blood, sputum, solid & liquid culture...

Library yield:

- Compared with similar Company K* and Company Q*, the DeepChek® NGS Library Preparation Assay had a higher library conversion rate. The library conversion rate was up to 90% at 1 **Product stability:** μg input.
- The DeepChek® NGS Library Preparation Assay had an excellent library amplification efficiency. Under the same cycle number, with 100 ng and 10 ng of gDNA inputs, the

yield of the library prepared by the DeepChek® NGS Library Preparation Assay was 3 times that of the similar products of Company K* and Company Q*.

Compared with similar products Company K*, Company N* and Company Q*, in sequencing data quality, DeepChek® NGS Library Preparation Assay had excellent performance in mapping rate and coverage rate, with high sequencing quality.

products of **Product repeatability**:

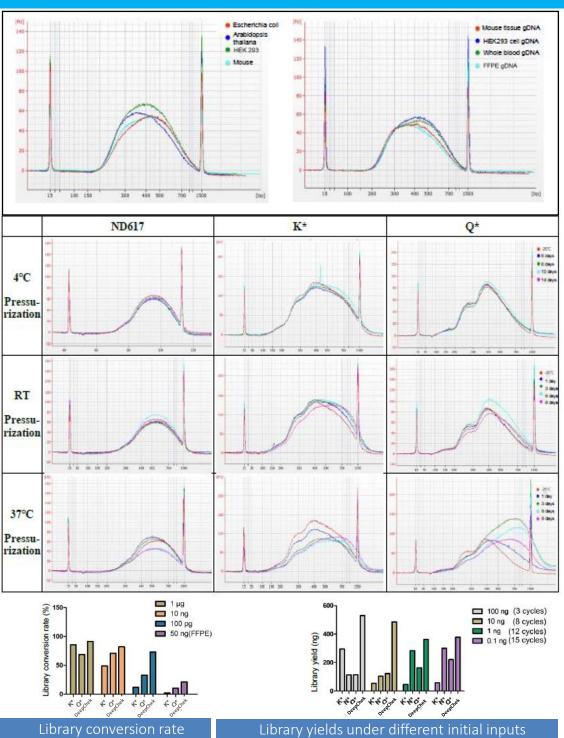
DeepChek® NGS Library Preparation Assay had good repeatability between wells and batches.

DeepChek® NGS Library Preparation Assay had good stability under pressurization. Under different pressurization conditions, the final library distribution basically remained unchanged.

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Library Size Distribution

DeepChek® NGS LIBRARY PREPARATION V2 Performances

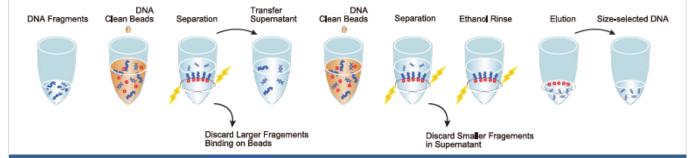


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DeepChek® NGS Clean-up beads

Seamless Alternative for AMPure XP Beads

- Seamless alternative for AMPure® XP Beads: same usage, similar yield, and identical size-distribution.
- Compatible with almost all current protocols for DNA library preparation.
- Cost-effective.



References

Library preparation for Illumina

DeepChek® NGS LIBRARY PREPARATION V2 (24 indexes) 116B24+124B24 DeepChek® NGS LIBRARY PREPARATION V2 (48 indexes) 116B48+124B48 DeepChek® NGS LIBRARY PREPARATION V2 (96 indexes) 116B96+124B96 116B384+124B384 DeepChek® NGS LIBRARY PREPARATION V2 (384 indexes) Library preparation for Ion Torrent Available soon

DeepChek® NGS LIBRARY PREPARATION IT

Library preparation for MGI

DeepChek® NGS LIBRARY PREPARATION MGI

Library preparation for Nanopore

DeepChek® NGS LIBRARY PREPARATION NP

DNA Clean-up

DeepChek® NGS Clean-up beads (60mL) DeepChek® 96x0.2 mL wells plate (25 units)

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For Research Use Only (RUO): not for use in diagnostic procedures, no claim or representation is intended to provide information for the diagnosis, prevention, or treatment of disease



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Available soon

Available soon

N411-02

B70501-01



CERTIFICATE OF ANALYSIS

| Product Name/Description | DeepChek® Adapters (24) V2 | | | | | | |
|---|--|-----------------------|------|----------------------|------------------|--|--|
| Cat. # | 124B24 | | | | | | |
| Lot # | 124B24240102A | | | | | | |
| Serial number # | from | 124B24240102A_01 | to | | 124B24240102A_38 | | |
| Storage Conditions | -20 DEGREES CELSIUS (°C) | | | | | | |
| Shipping conditions | DRY ICE | | | | | | |
| Expiration Date (YYYY-MM) | 2025-07 | | | | | | |
| Manufacturing Date (YYYY-MM-DD) | 2024-01-11 | | | | | | |
| Package Size | 24 TESTS | | | | | | |
| Country of Origin | FRANCE | | | | | | |
| Manufacturer | ABL SA | | | | | | |
| Dangerous goods classification | NA | | | | | | |
| Luminosity | NO NEED TO BE PROTECTED FROM LIGHT | | | | | | |
| Humidity | 25-80% | | | | | | |
| Primary packing | POLYPROPYLENE MICROTUBES 0.5mL and 1.5mL | | | | | | |
| Package Contents | 1. Adapters (24) | | | | | | |
| Product Documentation | DOCUMENTS | S AVAILABLE UPON REQU | JEST | | | | |
| Quality Control | | | | | | | |
| PCR and sequencing | | | | | | | |
| Consistent libraries were confirmed by PCR and sequencing using a control DNA as a template. No specific amplification was observed without template. | | | | | | | |
| It is certified that this product meets above specifications. | | | | | | | |
| Qualified and authorized product inspector | | | | | | | |
| | | Name // Title | FI- | atasas's O'sasatasas | | | |
| | | rvaille // Title | Ele | ctronic Signature | | | |
| | | Charlène Orliac | | | | | |
| | | Laboratory technician | | | | | |
| | | | | | | | |
| | | | | | | | |



14 Avenue de l'Europe

77144 MONTEVRAIN

CERTIFICATION SOCIETY

CERTIFICATE ISO 13485 : 2016

N° Certificate: 221013/1551F

We hereby declare that, on the basis of the dossier of certification, and further to the audit undergone successfully, the company:

Advanced Biological Laboratories (ABL SA) - Luxembourg

Site: ABL Diagnostics S.A
33 Chemin de l'Argile

13010 Marseille, France

has been certified on

7th October 2022

In accordance with the ISO 13485 standard for a period of 3 years in the following fields

- Design, development, production, distribution, training and support of in-vitro diagnostic medical devices.
 - Distribution of medical devices.

and has the right to use this certificate in the fields described before

General Management Henry CHARLIER General Management Christian STIEVENART

Paris, 19th October 2022

AN IMPROPER USE OF THIS CERTIFICATE BY THE COMPANY LEADS AUTOMATICALLY TO ITS REVOCATION