INvision
Precision Medicine

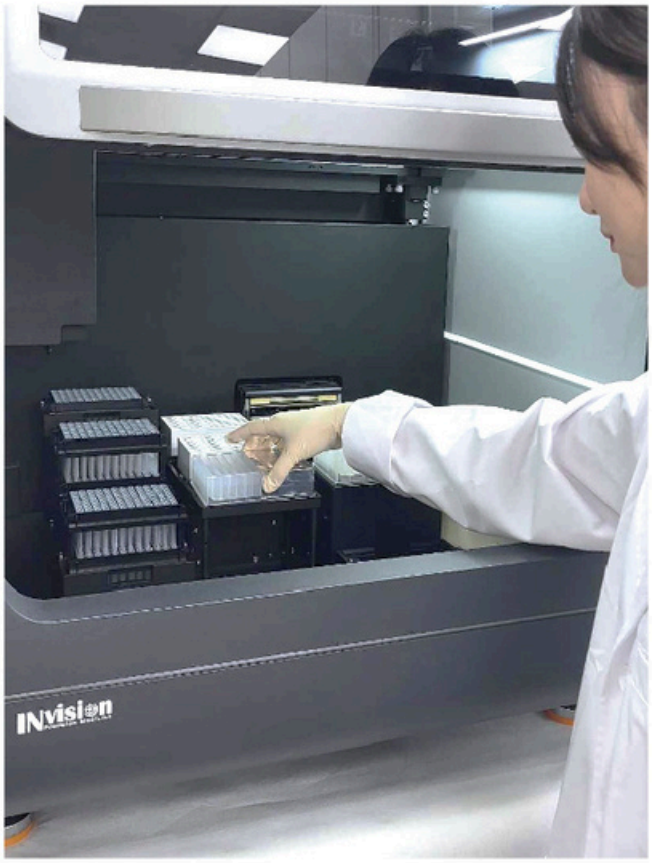
iNA™ NGS Workstation

Simplify your NGS library prep experience

Making NGS Library Preparation Simple and Reliable

Next Generation Sequencing (NGS) library preparation is a labor-intensive process. The **iNA™ NGS Library Prep Workstation** offers rapid setup technology, providing a cost-effective alternative to manual operation and granting laboratory personnel the freedom of a full walk-away procedure.

The **iNA™ NGS Library Prep Workstation** is a fully automated system capable of enhanced quantification and target enrichment. Experience high-quality results from this entirely automated device with integrated NGS-specific modules, validated protocols, and ready-to-run procedures. Overcome current NGS challenges and rely on the iNA NGS workstation to automate your NGS library preparation.



Overcoming Manual Library Preparation Barriers

Manual NGS library preparation requires numerous steps, making it labor-intensive, time-consuming, error-prone, and costly. Integrate an iNA™ NGS Library Prep Workstation to optimize your workflow.

Technical and Operation

- Reduced manual intervention and errors.
- Higher batch processing capacity.
- Enhanced sample safety
- Minimized contamination risks.

Human Resources

- Reduced training time and costs
- Efficient utilization of manpower
- Reduced manual error corrections.

Economic and Cost Benefits

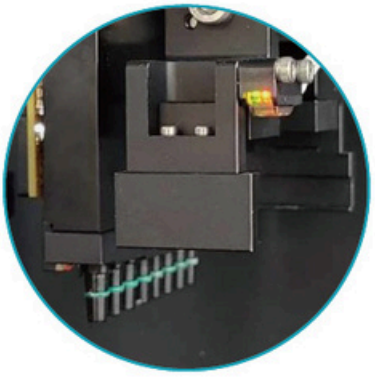
- Optimized reagent use leading to less waste and efficient management.
- Long-term cost benefits.
- Scalability.

Increase output, in less time and more space.

Benefits for your laboratory:

- **Straightforward procedure,** a unique system designed for effortless and seamless operation.
- **Streamlined workflow** achieved by minimizing manual involvement with an all-in-one hardware solution, ready-to-use reagents, and straightforward workflow management software.
- **Flexibility** for a wide range of experimental setups, ranging from 1 to 48 (varying by reagent kit) – ideal when dealing with frequently changing sample numbers.
- **Elevated reproducibility,** improved results due to high precision pipetting, prevention of human-errors and process variability

Compact one-box device, maximizing your laboratory space (760 × 700 × 800 mm)

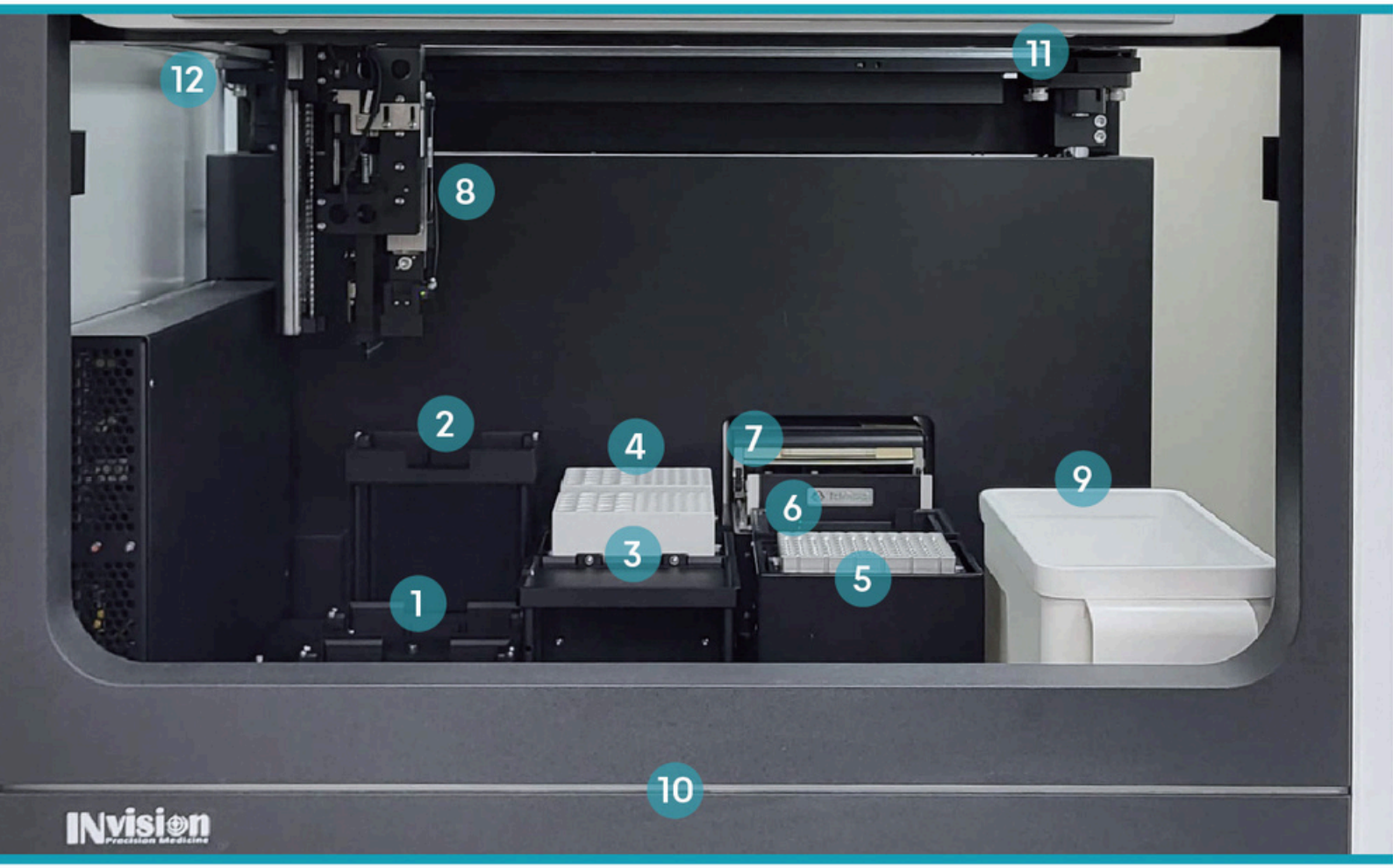


Robotic arm sensors, alerts of abnormal pick-ups, insufficient pipette heads, tip detachment

Reagents, adaptable for all NGS library preparation kit

Optimal throughput from the inside out

iNA NGS Workstation delivers a highly flexible and precise pipetting mechanism, **ensuring an accurate and complete walkaway operation to optimize your workflow.**



1. Three-Layered Stackable Tip Rack
2. Tip Rack Tower
3. Twelve-well Plate Rack
4. Temperature Control Module
5. Shaker with Heating Function
6. Programmable Magnetic Stand
7. On-Deck Thermal Cycler
8. Robotic Arm with 1 to 8-Channel Pipette and Gripper
9. Waste Bin for Solid and Liquids
10. Status Light Indicator
11. UV Germicidal Lamp
12. HEPA filter

Features and modules that sets the iNA NGS Workstation apart

Three-layer stackable **tip rack** reducing deck space and reloading time

Programmable **magnetic stand** optimize the recovery rate of clean up

Integrated **on-deck thermal cycler,** suitable for various PCR reactions

Long slot **reagent box rack** provide storage of reagent box, offering faster pipetting processes

Instant **temperature control module** with adjustable and set temperatures, ensuring stable reagent quality

Adding simplicity at every step

iNA NGS Workstation Software

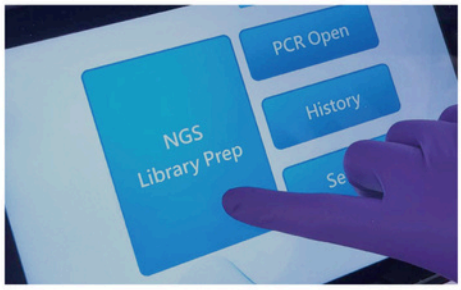
Experience a touchscreen interface with simple and dedicated built-in protocols, for reliable operations and workflow.

- Easy-to-use interface with step-by-step instructions provided
- No special training required
- Consumables and solutions are displayed prior to every run for efficient resource management
- Visual progress of workflow and samples showcased on display

Fast and simple set up

User-friendly interface with intuitive touchscreen, reducing setting up time and operator training.

- Simple protocol options
- History of procedures

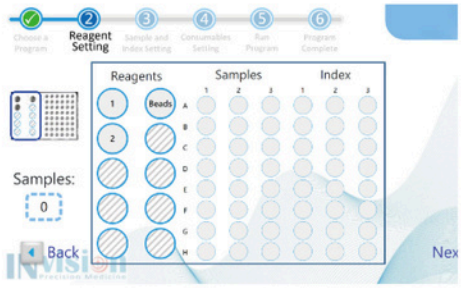


Touchscreen interface

System Smart Commands

Built-in protocols are pre-set with recommended parameters and verification checkpoints. Contains the ability to detect errors within the procedure set up.

- No installation
- No scripting



Step-by-step commands – spend less time setting up pipetting components

Simple system for managing workflow

Monitor procedure stage and track your productivity. The workflow can be commanded to stop or start at any stage.

- 'Pause' and 'Play' options
- Operation runtime

Track procedure stage and runtime

The fast lane to genomic insight

iNA™ NGS Library Prep Workstation acts as a powerful tool in simplifying the NGS process. The workstation combines automation, protocols, reagents and consumables into a streamlining workflow to generate libraries for Illumina sequencing platforms.

Sample Preparation

iNA™ Automated Nucleic Acid Purification Platform

iNA™ Nucleic Acid Extraction Device and Kits

- FFPE one-step extraction kit: FFPE samples directly used without dewaxing
- cfDNA extraction kit: High concentration, high purity for NGS lib prep
- RNA and Genomic DNA extraction kits
- Optimal nucleic acid extraction solution for NGS library preparation

Library Preparation and Target Enrichment

iNA™ NGS Automated Library Prep Workstation

Adaptable for all NGS Prep

- WGS / WES library preparation
- Amplicon-based NGS Panel Kit
- Capture-based NGS Panel Kit
- Long-range PCR

Sequencing

Illumina

Loading pooled **NGS libraries** onto a flow cell of sequencer

Data Analysis and Reporting

iNA™ Reporter

Automated Analysis and System Integration Assistance

Module	Instrument Specifications
Robotic Arm	X-Y-Z three-axis movement robotic arm combine with 1 to 8 channel micropipette module and gripper (independent flexibility)
Arm positioning accuracy	± 0.1 mm
Sample processing capacity	Supports 1-48 or more samples per run
Volume	2 µl-200 µl 8-channel fixed-spacing micro pipette tips
Volume accuracy	200 µl ± 1%(200 µl micro pipette tips)
Error alerts	Abnormal pipette tip pick-up alerts
Programmable magnetic stand	Lifting range : 0-15 mm
Temperature control module	Temperature range : 4-96°C Temperature accuracy : ± 1°C (55°C) Temperature uniformity : ± 1°C (72°C)
Shaking module	Temperature range : RT-100°C Amplitude and frequency : 2.4 mm; 300-1500 rpm
Thermal cycler	Temperature range : 4-99°C Temperature control accuracy : ≦ ± 0.3°C Temperature uniformity : ≦ ± 0.2°C Average heating rate : ≧ 4.2°C/s Average cooling rate : ≧ 2.2°C/s
Contamination prevention design	1. HEPA filtration 2. External exhaust system 3. UV germicidal lamp (lifespan 10,000 hours)
Size	76 cm width x 70 cm depth x 80 cm height
Weight	200 kg
Input power	AC 100-240 V, frequency 50/60 Hz

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