

Bring Technology to Life



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February 19, 2025 / Version 3.0

TIANLONG
Nucleic Acid
Extraction Solution



Contents

- Tianlong Nucleic Acid Extractor

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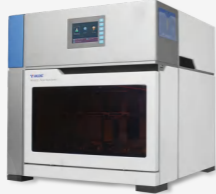








Tianlong Nucleic Acid Extraction Reagent

- ▶ Nucleic Acid Extraction
- ▶ DNA Purification
- ▶ Accessories

HIGH EFFICIENCY
TO TAKE YOUR
RESEARCH FURTHER.

Overview

	GeneFlex	Libex	GeneRotex 24	GeneRotex 48	GeneRotex 96	Npex 192	PANA9600S	PANA9600X
Model								
Main Function	<ul style="list-style-type: none"> Nucleic Acid Extraction 						<ul style="list-style-type: none"> Sample information scanning Sample loading Nucleic acid extraction PCR setup 	<ul style="list-style-type: none"> Capping/decapping Sample information scanning Sample loading Nucleic acid extraction PCR setup
Key Features	<ul style="list-style-type: none"> Compact design Small throughput Flexible combination 	<ul style="list-style-type: none"> Highly efficient extraction Simple and remarkable software 	<ul style="list-style-type: none"> Workflow for extraction from ultra- large volume samples; Suitable for more complicated down-stream applications 	<ul style="list-style-type: none"> Designed For processing large volume samples Innovative rotary mixing technology for extraction 	<ul style="list-style-type: none"> 96 sample in one run Innovative rotary mixing technology for extraction 	<ul style="list-style-type: none"> Ultra-high throughput with 1-192 sample in one run Highly Efficient and rapid extraction 	<ul style="list-style-type: none"> Highly automatic workflow 	<ul style="list-style-type: none"> Highly automatic workflow
Throughput	16	32	24	48	96	192	96	96
Mixing Method	Rotary Mixing	Vibration Mixing	Rotary Mixing	Rotary Mixing	Rotary Mixing	Vibration Mixing	Rotary Mixing	Rotary Mixing
Processing Volume	20 ~ 1700µL	30 ~ 1000µL	50 ~ 15000µL	50 ~ 3000µL	30 ~ 1000µL	30 ~ 1000µL	30 ~ 1000µL	30 ~ 1000µL
Sample Processing Volume	200 ~ 500µL	50 ~ 200µL	50 ~ 5000µL	50 ~ 1000µL	50 ~ 200µL	50 ~ 200µL	50 ~ 200µL	50 ~ 200µL
Temperature Control Range	Temperature control separately for lysis and elution. Temperature ranges from 30°C to 120°C							
Pipetting Performance	/	/	/	/	/	/	Below 15 µL: accuracy: A≤2.0%, repeatability: CV≤3.0%; 15 µL to 50 µL: accuracy: A≤1.5%, repeatability: CV≤1.5%; Above 50 µL: accuracy: A≤1.0%, repeatability: CV≤1.2%.	
Compatible Consumables	Tianlong specialized 96-deep-well plates; Tianlong specialized 6-strip tubes	Standard 96-well plates; Standard 6-strip tube	Tianlong specialized 15ml single reaction tube	Tianlong specialized 48-deep-well plates	Standard 96-deep-well plates; Standard 6-strip tube	96 deep-well-plate	Standard 96 deep-well plates; Standard 6-strip tubes	Standard 96 deep-well plates; Standard 6-strip tubes
Contamination Control Measures	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection; Auto power-off after UV disinfection 	<ul style="list-style-type: none"> UV disinfection 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection; Auto power-off after UV disinfection 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection Anti-droplet: air tightness and anti-droplet design and an external droplet design; Strict zoning; 	<ul style="list-style-type: none"> Negative pressure HEPA filtration UV disinfection Anti-droplet: air tightness and anti-droplet design and an external droplet design; Strict zoning;

GeneFlex

Automatic Nucleic Acid Extractor

For flexible throughput needs, GeneFlex is your ideal answer

GeneFlex Automatic Nucleic Acid Extractor is a compact and flexible automatic nucleic acid extractor designed with rotary mixing technology(RMT). GeneFlex can flexibly compose 16 x n different throughputs to meet the needs of simultaneous extraction for different projects without interfering with each other. Apart from its excellent performance, GeneFlex has also won the German Red Dot Design Award 2021 for its user-friendly design. With flexible throughput and independent extraction module, GeneFlex can be your ideal choice for faster and immediate testing tasks.



Flexible throughput

Small footprint

Immediate results



Highly flexible for your needs

GeneFlex can flexibly compose 16 x n different throughputs to meet the needs of simultaneous extraction without interfering with each other. With independent extraction module, GeneFlex can realize your different but immediate testing needs from various applications.



Automated workflow and remote upgrade

Automatic identification of reagent protocols and position of mixing sleeves; Remote upgrade and maintenance of instruments and reagent programs.



Minimized contamination measures

1) UV lamp; 2) Internal negative pressure; 3) HEPA filtration; 4) Rotary mixing to reduce aerosols; 5) Able to work inside a biosafety cabinet for highly- contaminated samples.



User-friendly and convenient

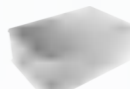

1) 6.86-inch touch screen operation or smartphone/tablet APP control with Wifi connection; 2) Automatic shutdown after UV disinfection; 3) Noise-free design.



Easy to start experiment anywhere

With mobile power, GeneFlex can start the experiment anywhere to meet different scenario testing needs.

SPECIFICATIONS

Model	GeneFlex 16	GeneFlex 32	GeneFlex 48	GeneFlex 96	GeneFlex 192
Throughput	16	32	48	96	192
Processing Volume	20µL-1700µL				
Sample Processing Volume	200-500µL				
Compatible Consumables	 Customized 96-deep-well plates		 Customized single 6-strip tubes		
Inter-well Difference	CV≤3%				
Mixing Method	Rotary mixing				
Rotary Speed	100~3000rpm				
Temperature Control Range	Temperature control separately for lysis and elution. Temperature range from 30°C to 120°C.				
Temperature Control Accuracy	Heating speed: ≥3.8°C/sec. Temperature accuracy: ±1.0°C. Temperature uniformity: ≤1.0°C.				
Languages	Chinese/English				
Protocol Management	Flexible to create, edit and delete protocols				
Operation Mode	Mode 1: Android systems in smartphones/tablets Mode 2: 6.86 inch full-color LCD screen				
Automatic Control	Automatic opening and dosing of the experiment cabin				
Reagent Identification	Automatic identification of reagent information and running the assays				
Mixing Sleeve Monitoring	Real-time monitoring of the mixing sleeves status in experiment				
Magnetic Bead Residue	≤1%				
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off				
Disinfection	Ozone + UV disinfection				
Auto Power-off	Auto power-off after UV disinfection				
Negative-Pressure Filtration	Negative pressure HEPA filtration module				
Connection Port Type	USB port				
Weight	7.4Kg (net)				
Instrument Dimensions	210mm(L)*229mm(W)*242mm(H)				
Power Supply and Power Consumption	AC100-240V, 50/60Hz				

EXTRACTION MENU

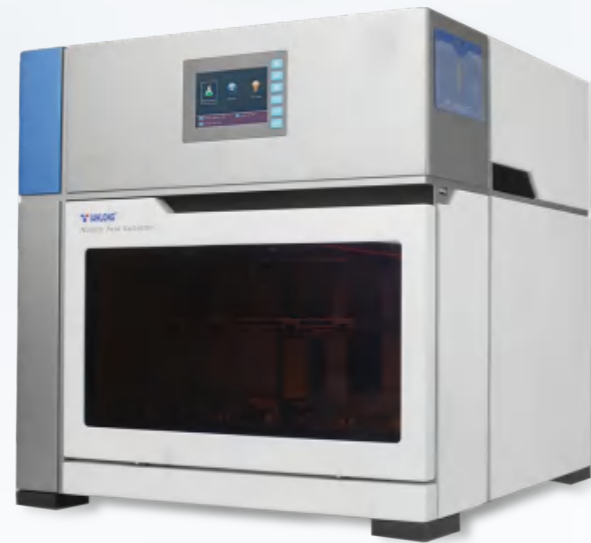
Application	Product Name	Sample Type	Ordering Code
Human	Virus Nucleic Acid Extraction Kit	Whole blood, serum, plasma, tissue fluid, urine, and swab media, etc.	T338H/T528H
Human	Virus Nucleic Acid Extraction Kit (rapid within 15min)	Swab media or other samples	T339H
Human	Whole Blood DNA/RNA Extraction Kit (For SMA Detection)	Whole blood samples	T509H
Human	Nucleic Acid Extraction Kit (For HCMV/EB DNA Extraction)	Serum, plasma, urine, whole blood, swab samples	T524H/T525H/T526H/T527H
Human	Nucleic Acid Extraction Kit (For Bacteria Genomic DNA Extraction)	Bacterial suspension cultures, cotton swabs, sputum, body fluids and stool samples	T529H/T530H
Human	Nucleic Acid Extraction Kit (For Plasmid DNA Extraction)	Bacterium solution sample	T839H/T840H
Environment	Viral DNA/RNA Extraction Kit	Environmental samples	T806H/T807H/T808H
Plant	Nucleic Acid Extraction Kit (For Plant Tissues Genomic DNA Extraction)	Plant tissue samples	T822H/T823H/T824H
Animal	Animal DNA/RNA Extraction Kit	Nasopharyngeal swabs, environmental samples, serum, blood swabs, and tissue samples	T079H/T080H
Animal	Nucleic Acid Extraction Kit (For Pet Diagnosis)	Nasopharyngeal swabs and environmental samples	T820H
Animal	Animal Tissues Genomic DNA Extraction Kit	Animal tissues samples including processed and fresh tissues	T825H/T826H/T827H

*More extraction reagents are under development and will come soon.

Libex

Nucleic Acid Extractor

Ensure great process safety, high performance, and user convenience for you



Tianlong Nucleic Acid Extractor Libex utilizes the proven magnetic bead method to extract highly purified nucleic acid from a wide range of sample types relevant for molecular diagnostics, genetic identity testing, forensic testing, biomedical research, and gene expression analysis. The combination of easy-to-use instruments with pre-loaded protocols selection, and magnetic bead-based sample preparation kits filled with unique reagents ensure rapid nucleic acid extraction and highly purified products.

FEATURES



Reliable results you can depend on

With magnetic bead-based extraction kits with pre-filled design, experimenters need only one step to start the extraction, which greatly minimizes manual error and ensures high purity of nucleic acid



More efficient extraction process

When Libex collocates with pre-filled extraction reagents, 32 samples of nucleic acid for COVID DNA can be extracted within 15 minutes (extraction time varies from reagent to reagent)



More convenient with two configurations

Standalone configuration: Machine keypad operation;
APP control configuration: Cloud-enabled control via Android smartphones/tablets



Efficient contamination control measures

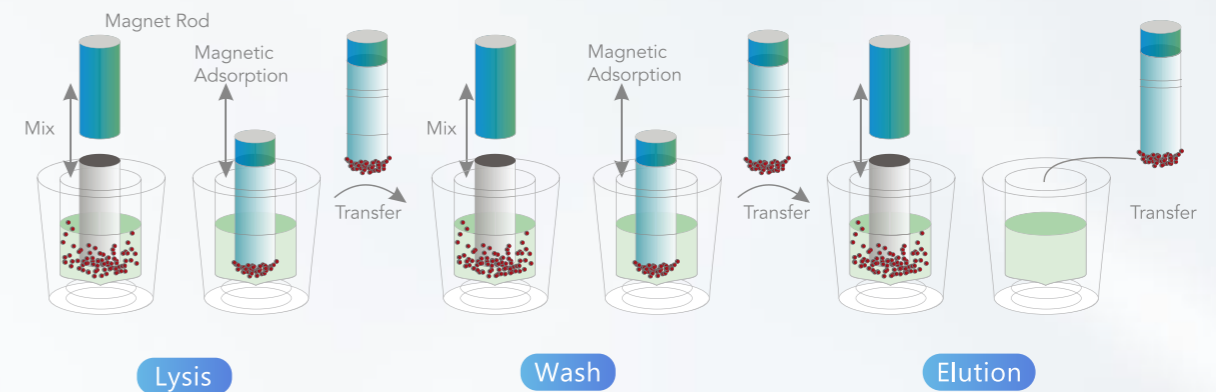
With unique sample cross-contamination control system and UV disinfection function, cross-contamination can be minimized



Simple and remarkable software

With the convenient software based on Android, a protocol can be set up and started with just a few clicks on your phones/tablets. Friendly and intuitive interface make it simple even for first time user

PRINCIPLE



SPECIFICATIONS

Model	Libex
Throughput	1-32
Processing Volume	30-1000uL
Recommended Sample Volume	200uL
Magnetic Bead Residue	≤1%
Suitable Consumables	96-well plates, 6 strip tube
Heating Temperatur	Lysis:room temperature to 120°C Elution:room temperature to 120°C
Processing Mode	Multi-mode, multi-speed available
Reagents	Reagents suitable for Magnetic Bead Method
Operation Mode	Mode1:Cloud-enabled control via smart phones/tablets(Android); Mode 2: Machine keypad operation
Experimental Storage	Up to 15 groups of proarams saved in device; Up to >500 groups of programs saved in the Android app
Protocol Management	Create, edit, delete, protocol mode
Contamination Control	Built-in UV disinfection module
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Connection Port Type	USB
Network Connection	Wifi
Instrument Dimensions	435mm*440mm*445mm(W*L*H)
Weight	31.5kg (net)
Power Supply	AC100-240V,50/60±1Hz; 600w
Operating Temperature Range	10~30°C
Operating Humidity Range	20%-85%

GeneRotex 24

Nucleic Acid Extractor

Workflow for extraction from large volume samples ensures high detection sensitivity



15mL
processing
volume

5mL
sample
volume

Tianlong GeneRotex 24 nucleic acid extractor is designed with our innovative rotary mixing technology (RMT), which can reduce aerosol generated during the purification process, minimize the risk of false positives caused by cross-contamination, and ensure the accuracy of experiment results. Compatible with Tianlong specialized large volume nucleic acid extraction kits, GeneRotex 24 can greatly improve detection sensitivity and extraction efficiency. The large sample volume workflow is suitable for more complicated downstream applications.



Workflow for extraction from large volume samples

The GeneRotex 24 is compatible with specialized large volume nucleic acid extraction kits. Up to 15 mL processing volume and 5 mL sample volume make pathogen detection sensitivity easier than before. Your extraction efficiency can be improved greatly.



Independent consumables design

The specialized single reaction tube design allows for the independent extraction of a single sample. This design ensures the sample processing process remains independent, preventing cross-contamination and reagent waste.



Innovative rotary mixing technology

Based on Tianlong's innovative rotary mixing technology (RMT), GeneRotex 24 can reduce aerosol generated during the experiment and minimize the risk of false positives caused by cross-contamination while being super quiet during operation.

HEPA

Negative pressure system with HEPA filtration

The negative pressure ventilation design with replaceable HEPA filtration can ensure the exhausted air with no biological hazards.

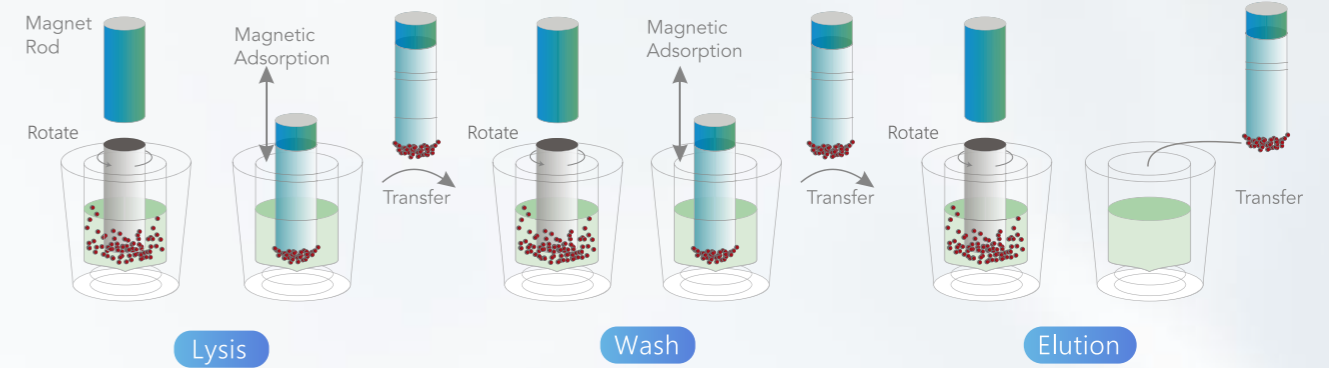


High purification and reliable results

Less than 1% residual amount of magnetic beads increase confidence in your experiment result.

FEATURES

PRINCIPLE



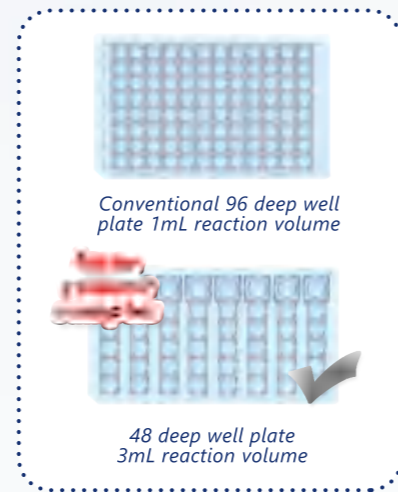
SPECIFICATIONS

Model	GeneRotex 24
Throughput	1-24
Reaction Volume	50-15000µL
Sample Volume	5000µL
Inter-well Extraction Difference	CV≤2%
Compatible Consumables	Specialized 15mL single reaction tube; specialized stirring sleeve 
Rotational Speed	≤3000rpm
Heating Temperature	Lysis heating: room temperature to 120°C Elution heating: room temperature to 120°C
Mixing Method	Rotary mixing
Operation Mode	7-inch full-color LCD touch screen operation
Program Storage	Up to 1000 programs can be stored
Protocol Management	Flexible to create, edit and delete protocols
Automatic Control	Motor-driven automatic opening and closing of the experiment cabinet
Magnetic Bead Residue	≤1%
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Contamination Control	Negative pressure; HEPA exhaust filter module; Built-in UV disinfection module
Connection Port Type	USB port
Weight	45kg (net)
Instrument Dimensions	490mm(L) × 540mm (W) × 480mm (H)
Power Supply and Power Consumption	AC100V-240V,50/60HZ;600VA

GeneRotex 48

Nucleic Acid Extractor

Designed for processing large volume samples with innovative rotary mixing technology

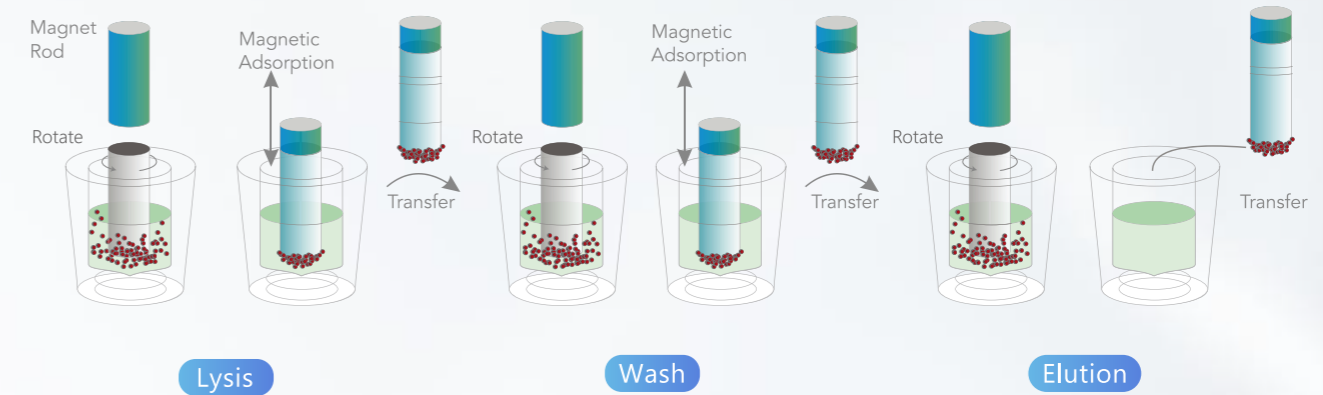


Tianlong GeneRotex 48 nucleic acid extractor is designed with our innovative rotary mixing technology (RMT), which can reduce aerosol generated during the purification process, minimize the risk of false positives caused by cross-contamination, and ensure the accuracy of experiment results. Compatible with Tianlong large volume nucleic acid extraction kits, GeneRotex 48 can greatly improve detection sensitivity and extraction efficiency.

FEATURES

- Designed for processing large volume samples**
 GeneRotex 48 is compatible with Tianlong large volume nucleic acid extraction kits. 1ml sample volume with independent designed consumable makes pathogen detection sensitivity easier than before. Your extraction efficiency can be improved greatly.
- Innovative rotary mixing technology**
 Based on Tianlong's Innovative rotary mixing technology(RMT), GeneRotex 48 can reduce aerosol generated during the experiment and minimize the risk of false positives caused by cross-contamination while being super quiet during operation
- Negative pressure system with HEPA filtration**
 The negative pressure ventilation design with replaceable HEPA filtration can ensure the exhausted air with no biological hazards
- High purification and reliable results**
 Less than 1% residual amount of magnetic beads increase confidence in your experiment result
- 7 inch color touch screen**
 Built-in 7-inch full-color LCD screen, easy to operate the experiment

PRINCIPLE



SPECIFICATIONS

Model	GeneRotex48
Throughput	1-48
Reaction Volume	50-3000uL
Sample Volume	1000μL
Compatible Consumables	Customized 48-deep-well plates
Rotational Speed	≤3000rpm
Heating Temperature	Lysis heating:room temperature to 120°C Elution heating:room temperature to 120°C
Mixing Method	Rotary mixing
Operation Mode	7-inch full-color LCD touch screen operation
Program Storage	Up to 1000 programs can be stored
Protocol Management	Flexible to create, edit and delete protocols
Automatic Control	Motor-driven automatic opening and closing of the experiment cabinet
Magnetic Bead Residue	≤1%
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Contamination Control	Negative pressure HEPA exhaust filter module; Built-in UV disinfection module
Connection Port Type	USB port
Weight	45kg(net)
Instrument Dimensions	510mm*490mm*480mm(W*L*H)
Power Supply and Power Consumption	AC100V-240V, 50/60HZ600VA

GeneRotex 96

Nucleic Acid Extractor

Innovative rotary mixing technology offers high efficiency of nucleic acid extraction and purification



Tianlong GeneRotex 96 nucleic acid extractor is designed with our innovative rotary mixing technology (RMT), which can reduce aerosol generated during the purification process, minimize the risk of false positives caused by cross-contamination, and ensure the accuracy of experiment results. The innovative 6*16 extraction module, compatible with 96-deep-well plates and 6-tube strips, can offer high-throughput extraction and reduce reagent waste without the conventional inconveniences caused by fixed throughput. Flexible and efficient, you can extract from 1 to 96 samples per run with GeneRotex 96.

FEATURES



7 inch color touch screen

Built-in 7-inch full-color LCD screen, easy to operate the experiment



High throughput and efficient extraction

6*16 extraction module with special 96 deep well plate and 6 strip tube designed for GeneRotex 96 to ensure high throughput and reduce reagent waste. You can extract from 1 to 96 samples per run



Innovative rotary mixing technology

Based on Tianlong's innovative rotary mixing technology(RMT), GeneRotex 96 can reduce aerosol generated during the experiment and minimize the risk of false positives caused by cross-contamination while being super quiet during operation



Negative pressure system with HEPA filtration

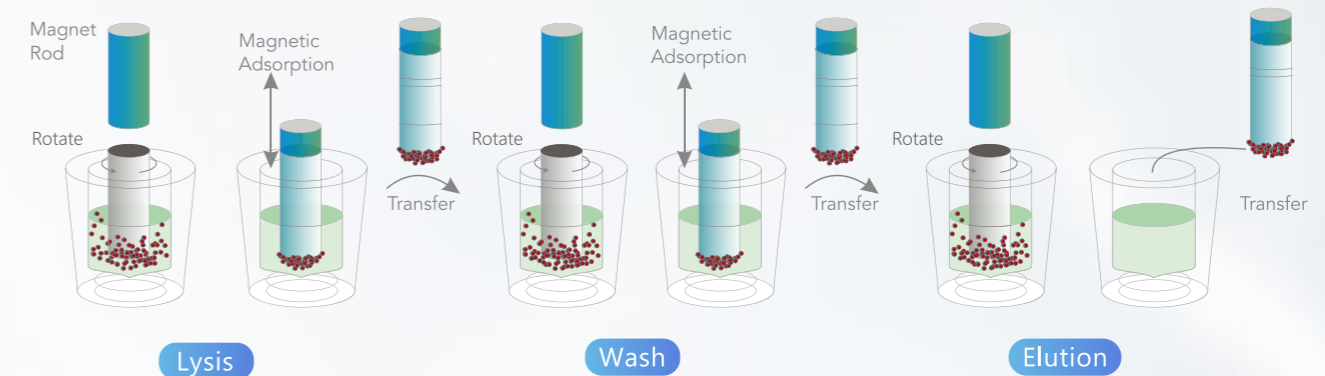
The negative pressure ventilation design with replaceable HEPA filtration can ensure the exhausted air with no biological hazards





High purification and reliable results

Less than 1% residual amount of magnetic beads increase confidence in your experiment result

PRINCIPLE



SPECIFICATIONS

Model	GeneRotex 96	
Throughput	1-96	
Reaction Volume	30-1000uL	
Sample Volume	200μL	
Compatible Consumables	 96-deep-well plates	 customized 6 strip tube
Inter-well Extraction Difference	CV≤3%	
Rotational Speed	≤3000rpm	
Heating Temperature	Lysis heating: room temperature to 120°C Elution heating: room temperature to 120°C	
Mixing Method	Rotary mixing	
Operation Mode	7-inch full-color LCD touch screen operation	
Program Storage	Up to 1000 programs can be stored	
Protocol Management	Flexible to create, edit and delete protocols	
Automatic Control	Motor-driven automatic opening and closing of the experiment cabinet	
Magnetic Bead Residue	≤1%	
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off	
Contamination Control	Negative pressure HEPA exhaust filter module; Built-in UV disinfection module	
Connection Port Type	USB port	
Weight	45kg(net)	
Instrument Dimensions	510mm*490mm*480mm(W*L*H)	
Power Supply and Power Consumption	AC100V-240V,50/60HZ;600VA	

Npex 192

Automatic Nucleic Acid Extractor

Ultra-high throughput, optimizing your extraction efficiency with confidence



Tianlong Nucleic Acid Extractor Npex 192 utilizes the proven magnetic bead method to extract highly purified nucleic acid from various samples. With ultra-high throughput and high efficiency, Npex 192 can complete nucleic acid extraction of 192 samples in 12 min. The combination of easy-to-use instruments with pre-loaded protocols selection, and magnetic bead-based sample preparation kits filled with unique reagents ensure rapid nucleic acid extraction and highly purified products.

FEATURES



Ultra-high throughput and rapid extraction

Npex 192 can complete nucleic acid extraction of 192 samples in 12 min. Realizing high-throughput processing of parallel samples and providing high-quality nucleic acids for your downstream applications.



Compact in design and space-saving

With 8-unit deep-well plate layout and Z-axis mechanical motion, Npex 192 can realize rapid extraction with the shortest movement. It can meet your high-throughput needs but also save your lab space.



Easy to operate and visual monitoring

Built-in 7-inch full-color LCD screen, easy to operate the experiment; Built-in scanner can automatically scan and identify the extraction program and start running; Visual monitoring of nucleic acid extraction progress.



Efficient temperature control

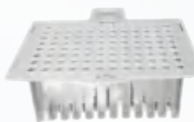
Separate temperature control for both lysis and elution. Precise temperature control ranges from room temperature to 120°C, supporting a wide range of reagent programs.



Efficient contamination control measures

- 1) Negative-pressure HEPA filtration;
- 2) UV disinfection ;
- 3) Anti-dripping design.

SPECIFICATIONS

Model	Npex 192
Throughput	1 ~ 192
Processing Volume	30 ~ 1000μL
Compatible Consumables	  96 deep-well-plate (1 ml reaction volume) Vertical mixing sleeve
Magnetic Bead Residue	≤ 1%
Temperature Control Range	Temperature control separately for lysis and elution. Temperature range from 30°C to 120°C.
Vertical Mixing	8 gears adjustable
Operating Language	Built-in bilingual (Chinese and English) operating languages.
Operation Mode	7-inch color LCD touch screen operation
Protocol Management	Flexible to create, edit and delete protocols
QR Code Scanning	With built-in barcode scanner, automatic scanning, identification and running protocols
Operation Monitoring	Visual monitoring of nucleic acid extraction progress
Program Storage	> 1000 experiment programs can be stored
Contamination Control	1) Negative-pressure HEPA filtration; 2) UV disinfection ; 3) Anti-dripping design
Auto Power-off	Auto power-off after UV disinfection
Power failure protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Connection Port Type	USB port
Network Connection	Ethernet connection
Dimensions	710 mm×535 mm×515 mm (L×W×H)
Weight	55 kg
Power Supply	AC 100-240V, 50/60Hz

EXTRACTION MENU

Application	Product Name	Sample Type	Ordering Code
Human	Virus Nucleic Acid Extraction Kit	Swab media samples	T518H
Animal	Animal Virus DNA and RNA Extraction Kit	Nasopharyngeal swab, environmental samples, serum samples, blood swab and tissue sample	T809H
Plant	Nucleic Acid Extraction Kit (For Plant Tissues Genomic DNA Extraction)	Plant tissue samples	T821H

*More extraction reagents can be customized for your applications.

APPLICATION AREA



PANA9600S

Automatic Nucleic Acid Workstation

Faster and cleaner, leading the new era of rotary nucleic acid extraction

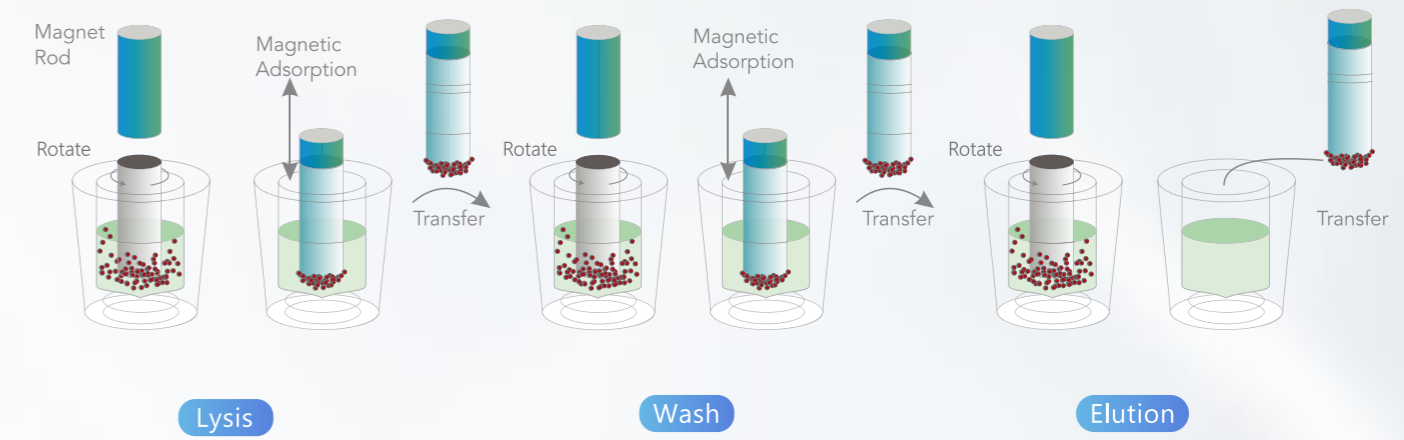


PANA 9600S automatic nucleic acid workstation is designed according to the principles of magnetic beads method and rotary nucleic acid extraction technology. This workstation integrates the workflow of sample information scanning, sample loading, nucleic acid extraction, and PCR system setup, which makes your experiment easy to start and greatly saves time for professionals. With compatible nucleic acid extraction kits, the nucleic acids needed can be extracted quickly and efficiently from various sample types including whole blood, serum and plasma, swab and urine for specific downstream applications.

FEATURES

- One-key operation for modularized experiment flow**
 With one-key operation, automated sample information scanning, sample loading, nucleic acid extraction, and PCR system setup for 96 samples of novel coronavirus can be finished within 50min
- Minimized contamination measures**
 With rotary nucleic acid extraction, smart drop capture, strict zoning, air filtration, and UV disinfection technology, cross-contamination can be reduced to ensure accurate results
- High precision and reliable results**
 With precise sample loading, accurate temperature ramp control, and precise liquid transfer design, consistent and precise results can be ensured for each of your assays
- Highly flexible for your needs**
 Compatible with various sample types and extraction kits; 4 PCR systems can be set up at the same time
- Automated workflow and hands-free operation**
 Automated barcode scanning for reagent identification, sample loading, nucleic acid extraction, PCR system setup; visualized consumable recognition; easy connection with LIS (laboratory information system)

PRINCIPLE



SPECIFICATIONS

Model	PANA9600S
Sample Capacity	1-96
Technical Principles	Magnetic beads method; Rotary nucleic acid extraction technology
Processing Capacity	Information scanning and nucleic acid extraction of 96 samples per run; 4 different PCR system can be set up
Sample Types	Plasma, serum, whole blood, swab, and urine, etc.
Sample Loading Channels	4
Pipetting Performance	Below 15 μ L: accuracy: $A \leq 2.0\%$, repeatability: $CV \leq 3.0\%$; 15 μ L to 50 μ L: accuracy: $A \leq 1.5\%$, repeatability: $CV \leq 1.5\%$; Above 50 μ L: accuracy: $A \leq 1.0\%$, repeatability: $CV \leq 1.2\%$.
Liquid Level Detection	CapSense/Gas pressure sensor
Sample Tubes	Compatible with all types of blood collection tube, 1.5mL and 2.0mL centrifugal tubes, freezing tubes, and sample loading cups, etc.
Temperature Control	Lysis and elution, temperature flexible to control between 35°C and 120°C
Information Tool	Barcode scanning for reagent identification; visualized consumable recognition
PCR Reagent Chamber	Avoid light design; power-on automatic refrigeration (4°C~15°C)
PCR Consumables	Compatible with 0.1mL, 0.2mL 8 strip tube and 96-well plates
Minimized Contamination	Independent closed extraction area, top directional exhaust creates an internal negative pressure system Sampling device with air tightness and anti-dropping design External droplet catching plate Sterilization device in experiment cabin and extraction cabin Customized function: directional ventilation system for the nucleic acid extraction area
Information Technology	Scanning the bar codes of multiple samples one by one while sample holder is loaded Information connection of Sample tube-Deep well plate-PCR tube Easy connection with LIS (laboratory information system)
Device General Information	1370mm(L)*810mm(W)*890mm(H); 220kg(net); 12.1-inch touch screen

PANA9600X

Automatic Nucleic Acid Workstation

All innovation for boosting your lab efficiency with simplified workflow

PANA 9600X automatic nucleic acid workstation is designed based on magnetic beads method and rotary nucleic acid extraction technology. It integrates the workflow of automatic capping/decapping for sample tubes, sample information scanning, sample loading, nucleic acid extraction, and PCR system setup, which makes your experiment easy to start and greatly saves time for professionals. With compatible nucleic acid extraction kits, the nucleic acids needed can be extracted quickly and efficiently from various sample types including whole blood, serum, plasma and swab scrub solution for specific downstream applications.

Automated Capping/
Decapping for Sample
Tubes

1

Sample Information
Scanning

2

Sample Loading

3

Nucleic Acid Extraction

4

PCR Setup

5



Highly automated workflow and rapid extraction

With one-key operation, automatic capping/decapping for sample tubes, sample information scanning, sample loading, nucleic acid extraction, and PCR system setup for 96 samples can be finished within 40-80 min(relying on the reagent)

More reliable results you can depend on

With precise sample loading, accurate temperature ramp control, and precise liquid transfer design, consistent and precise results can be ensured for each of your assays

Smart information technology

Sample information scan; reagent information identification; visualized consumable recognition; easy connection with LIS (laboratory information system)

Highly flexible for your needs

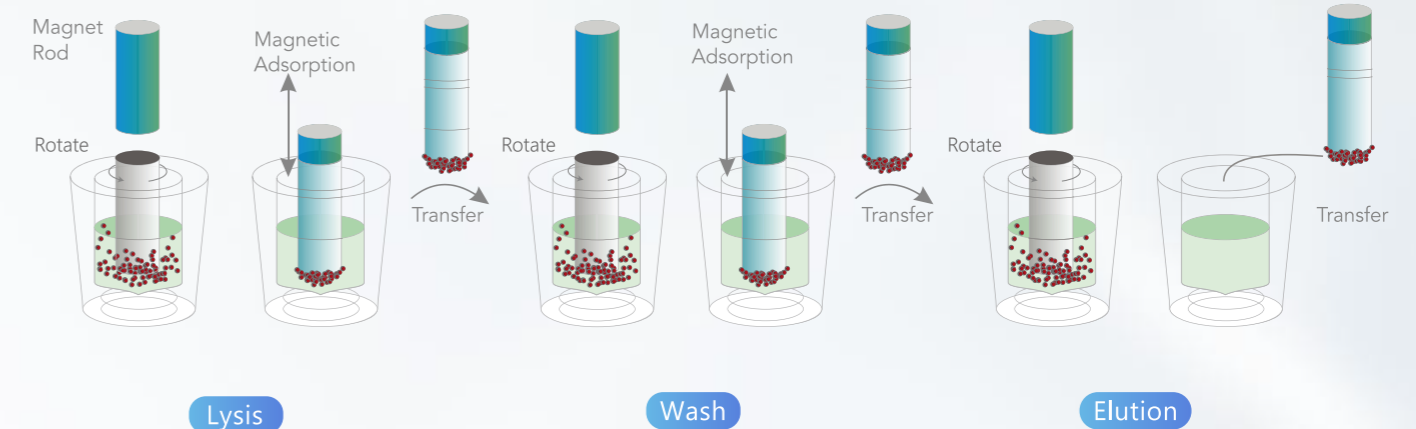
Compatible with various sample types and extraction kits; 4 PCR systems can be set up at the same time

Minimized contamination measures

With rotary mixing for nucleic acid extraction, HEPA filter, smart drop capture, strict zoning, and UV disinfection technology, cross-contamination can be reduced to ensure accurate results

FEATURES

PRINCIPLE



SPECIFICATIONS

Model	PANA9600X
Sample Capacity	1-96
Technical Principles	Magnetic beads method; Rotary nucleic acid extraction technology
Processing Capacity	Nucleic acid extraction of 96 samples per run; 4 different PCR system can be set up
Sample Types	Plasma, serum, whole blood, swab scrub solution, etc.
Sample Loading Channels	4
Pipetting Range	1μL-1000μL
Pipetting Performance	Below 15 μL: accuracy: A≤2.0%, repeatability: CV≤3.0%; 15 μL to 50 μL: accuracy: A≤1.5%, repeatability: CV≤1.5%; Above 50 μL: accuracy: A≤1.0%, repeatability: CV≤1.2%.
Liquid Level Detection	CapSense/Gas pressure sensor
Sample Tubes	Compatible with standard blood collection tube, various thread sampling tube, etc.
Temperature Control	Lysis and elution, temperature flexible to control between 35°C and 120°C
Extraction Consumables	96 deep-well plates, 6 strip tubes
Information Tool	Barcode scanning for reagent identification; visualized consumable recognition
PCR reagent chamber	Avoid light design; power-on automatic refrigeration (4°C ~8°C)
PCR Consumables	Compatible with 0.1mL, 0.2mL 8 strip tube, and 96-well plates
Temperature Accuracy	≤2.0°C
Temperature Uniformity	±1.2°C
Minimized Contamination	Anti-droplet: air tightness and anti-droplet design and an external droplet design; Strict zoning; Directional exhaust; HEPA filter; UV disinfection
Information Technology	Scanning the bar codes of multiple samples one by one while sample holder is loaded Information connection of Sample tube-Deep well plate-PCR tube Easy connection with LIS (laboratory information system)
Device General Information	1370mm(L)*810mm(W)*960mm(H); 235kg(net); 12.1 inch touch screen
Interfaces	Ethernet, USB
Power Supply	AC 100-240V, 50-60Hz

Nucleic Acid Extraction Kit

Viral DNA and RNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T014H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Swab sample	COVID
T016H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 strips		
T060H	Magnetic Beads Method	32T/Kit (Pre-filled), 8T/Strip x 4 Strips		
T183H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T050H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Swab sample	Viral DNA/RNA
T051H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate x 4 Plates		
T052H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T049H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T325H	Magnetic Beads Method	96T/Kit (Pre-filled), 16T/Plate x 6 Plates	Whole blood, serum, plasma, tissue fluid, urine and swab lotion samples	Viral DNA/RNA For PAN9600S
T041H	Magnetic Beads Method	48T/Kit (Pre-filled), 8T/Plate x 6 Plates	Whole blood, serum, plasma, tissue fluid, urine and swab lotion samples	Viral DNA/RNA For GeneRotex48
T392H	Magnetic Beads Method	96T/Kit (Pre-filled), 8T/Plate x 12plates		
T393H	Magnetic Beads Method	96T/Kit (Pre-filled), 8T/Plate x 12plates	Swab sample	COVID For GeneRotex48
T322H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate x 4 Plates	Whole blood, serum, plasma, interstitial fluid, urine, swab sample	Viral DNA/RNA
T323H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T324H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T038H	Magnetic Beads Method	20T/Kit(Pre-filled), 1T/Strip x 20 Strips		
T111H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Serum, plasma, urine and whole blood	HCMV/EB
T112H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T123H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T113H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Swab sample	HPV
T114H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T115H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips	Serum, plasma	HBV/HCV
T508H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T507H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T506H	Magnetic Beads Method	48T/Kit (Pre-filled), 16T/Plate x 3 Plates		
T505H	Magnetic Beads Method	96T/Kit (Pre-filled), 16T/Plate x 6 Plates	Environmental water samples, aerosol samples, solid surface wipe samples, stool samples and swab samples	Viral DNA/RNA
T810H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T811H	Magnetic Beads Method	20T/Kit (Pre-filled) 5T/Plate x 4Plates		
T812H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T338H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Whole blood, serum, plasma, interstitial fluid,urine, swab sample	Viral DNA/RNA For GeneFlex
T528H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T339H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Swab sample	
T806H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate X 4 Plates		
T807H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Environmental samples, including environmental water samples, aerosol samples, solid surface wipe samples, stool samples, swab samples	Viral DNA/RNA For Panall 8000
T808H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T524H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Serum, plasma, urine, whole blood, swab sample	HCMV/EB For GeneFlex
T525H	Magnetic Beads Method	32T/Kit (Pre-filled), 8T/Strip x 4 Strips		
T526H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T527H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T518H	Magnetic Beads Method	384T/Kit (Pre-filled), 96T/Plate x 4 Plates	Swab sample	Viral DNA/RNA For Npex 192
T819H	Magnetic Beads Method	24T/Kit (Pre-filled), 1T/Strip x 24 Strips	Swab sample	Viral DNA/RNA For Panall 8000
T108H	Spin Column Method	32T/Kit (Non Pre-filled)	Serum, swab sample	Viral DNA/RNA

Bacteria Genomic DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T131H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Bacterial suspension cultures, cotton swabs, sputum, body fluids and stool samples	Bacteria Genomic DNA
T132H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T134H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T838H	Magnetic Beads Method	24T/Kit (Pre-filled), 1T/Strip x 24 Strips	Stool sample, bacterial culture sample	Bacteria Genomic DNA For Panall 8000
T529H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Bacterial suspension cultures, cotton swabs, sputum, body fluids and stool samples	Bacteria Genomic DNA For GeneFlex
T530H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T136H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Sputum, chest water, drainage, cerebrospinal fluid, ascites, and tissues samples	TB DNA
T137H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T135H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		

Viral and Bacteria DNA/RNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T510H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Whole blood, serum, plasma, urine and swab sample	GBS/HPV
T511H	Magnetic Beads Method	32T/Kit (Pre-filled), 8T/Plate x 4 Plates		
T512H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T513H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		

Whole Blood Genomic DNA and RNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T146H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Whole blood	Whole Blood Genomic DNA
T147H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates		
T148H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate x 4 Plates		
T149H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T372H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates	Whole blood	SMA
T376H	Magnetic Beads Method	32T/Kit (Pre-filled), 8T/Plate x 4 Plates		
T516H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T389H	Magnetic Beads Method	96T/Kit (Pre-filled) 8T/Plate x 12 Plates	Blood samples, bone marrow blood	Whole Blood Genomic RNA
T509H	Magnetic Beads Method	32T/Kit(Pre-filled), 8T/Plate x 4 Plates		
T534H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 strips		
T533H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate x 4 plates		
T547H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 plates	Serum, plasma	Blood Screening For Panall 8000
T546H	Magnetic Beads Method	64T/Kit(Pre-filled), 16T/Plate x 4 plates		
T552H	Magnetic Beads Method	24T/Kit (Pre-filled), 1T/Strip x 24 Strips		

DBS (Dried Blood Spot) Genomic DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T151H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate x 4 Plates	Dried blood spot	DBS (Dried Blood Spot) Genomic DNA
T152H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate x 4 Plates		
T153H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip x 20 Strips		
T150H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		
T390H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate x 4 Plates		SMA

FFPE Genomic DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T161H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips	Paraffin embedded(FFPE) tissue	FFPE Genomic DNA
T162H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates		
T165H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T163H	Spin Column Method	20T/Kit (Non Pre-filled)		

Free Circulating DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T171H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips	Serum, plasma	Free Circulating DNA
T172H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates		
T173H	Spin Column Method	20T/Kit (Non Pre-filled)		NIPT
T532H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 plates		
T531H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		

Stool DNA/RNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T180H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates	Stool	Stool DNA/RNA
T181H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates		
T182H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		

Buccal Swabs DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T191H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates	Buccal swab	Buccal Swabs DNA
T192H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		

Amniotic Fluid DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T201H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates	Amniotic fluid	Amniotic Fluid DNA
T202H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T321H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		

Plasmid DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T901H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates	Bacterium solution	Plasmid DNA
T936H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		
T839H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 strips		Plasmid DNA For GeneFlex
T840H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 plates		

Plant Tissues Genomic DNA Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T084H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates	Plant tissues (e.g. blade,pulp,seed,tuber)	Plant Tissues Genomic DNA
T085H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T087H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		Plant Tissues Genomic DNA For GeneFlex
T822H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T823H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates		
T824H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip × 20 Strips		
T821H	Magnetic Beads Method	192T/Kit (Pre-filled), 96T/Plate × 2 Plates		Plant Tissues Genomic DNA For Npex 192

Animal Related Extraction Kit

Cat.No	Technology	Specification	Sample Type	Test Item
T092H	Magnetic Beads Method	20T/Kit (Pre-filled) 5T/Plate × 4 plates	Animal tissues	Animal Tissues Genomic DNA
T093H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T825H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates	Animal tissues samples including processed and fresh tissues	Animal Tissues Genomic DNA For GeneFlex
T826H	Magnetic Beads Method	20T/Kit(Pre-filled), 5T/Plate x 4 Plates		
T827H	Magnetic Beads Method	20T/Kit(Pre-filled), 1T/Strip × 20 Strips		
T070H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates	Nasopharyngeal swab, environmental samples, serum samples or blood swab samples and tissue samples	Animal Virus DNA/RNA
T071H	Magnetic Beads Method	40T/Kit (Pre-filled), 10T/Plate × 4 Plates		
T072H	Magnetic Beads Method	20T/Kit (Pre-filled), 5T/Plate × 4 Plates		
T073H	Magnetic Beads Method	32T/Kit (Pre-filled), 8T/Strip × 4 Strips		
T074H	Magnetic Beads Method	20T/Kit (Pre-filled), 1T/Strip X 20 Strips	Whole blood, tissues, serum, swabs, feces, and semen samples	Animal Virus DNA/RNA For GeneFlex
T800H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T801H	Magnetic Beads Method	40T/Kit(Pre-filled), 10T/Strip × 4 Strips		
T802H	Magnetic Beads Method	20T/Kit(Pre-filled), 1T/Strip × 20 Strips	Nasopharyngeal swab, environmental samples and tissue samples	Animal Virus DNA/RNA For Npex 192
T837H	Magnetic Beads Method	32T/Kit(Pre-filled), 8T/Plate × 4plates		
T079H	Magnetic Beads Method	64T/Kit (Pre-filled), 16T/Plate × 4 Plates		
T080H	Magnetic Beads Method	20T/Kit(Pre-filled), 1T/Strip × 20 Strips	Nasopharyngeal swab, environmental samples, serum samples, blood swab and tissue samples	Animal Virus DNA/RNA For Npex 192
T809H	Magnetic Beads Method	384T/Kit (Pre-filled), 96T/Plate × 4 Plates		

DNA Purification Kit

Cat.No	Technology	Specification	Sample Type	Application
T941H	Magnetic Beads Method	20T/Kit(Pre-filled), 1T/Strip × 20 Strips	TAE or TBE buffered agarose gels	Recovery of DNA fragments purified from TAE or TBE buffered agarose gels

ACCESSORIES

	Product Name	Cat.No	Specification	Remark
1	Ribonuclease A (RNase A)	T935H	25mg/Kit	Rnase A and Rnase A Diluent can be ordered separately for plant tissues genomic DNA extraction and plasmid DNA extraction. Each set can be used for 60 tests Plant Tissues Genomic DNA Extraction Kit/1000 tests Plasmid DNA Extraction Kit.
2	TL Dewaxed Solution	T164H	100mL	Dewaxed Solution can be ordered separately for FFPE DNA extraction.
3	Dried Blood Spot Extract Digestive Fluid	T154H	50mL	Dried Blood Spot Extract Digestive Fluid can be ordered separately for DBS DNA extraction.

