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[ NMPA | FDA | CE ]



## GeneRotex 96/48

### Nucleic Acid Extractor



High-Throughput  
Multi-Module  
Reliable Contamination Control  
Super Mute

**Bring  
Technology  
to Life**



# GeneRotex 96/48

## Nucleic Acid Extractor

Tianlong Next-Generation Star Product  
Leading the Trend of Rotary Nucleic Acid Extraction!



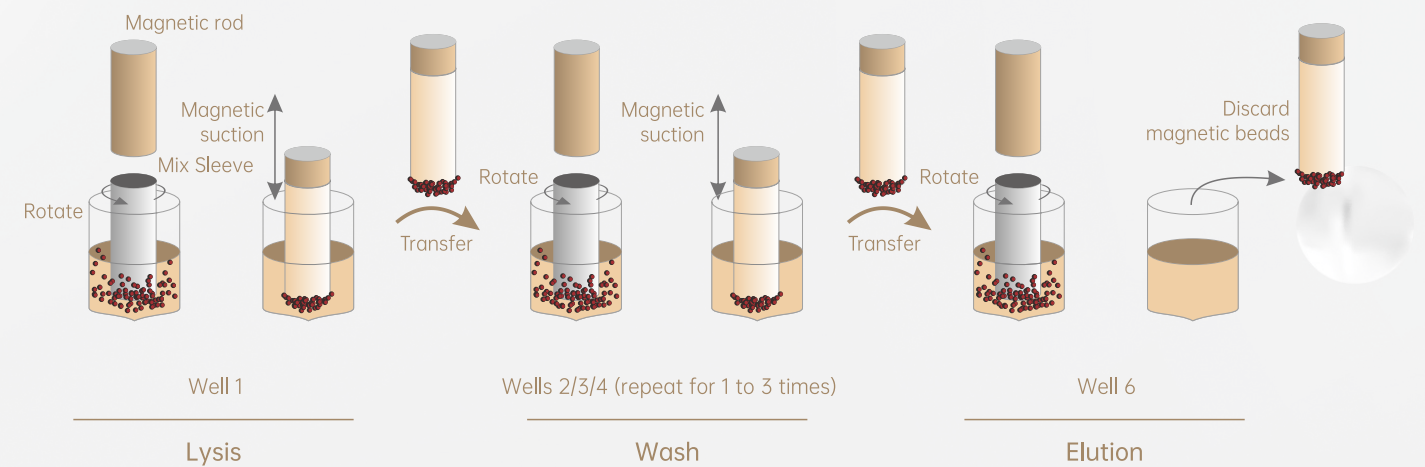
Independent intellectual property rights of the core innovative technology



Patent No.  
ZL201710435931.8

## Technical principle

GeneRotex 96/48 nucleic acid extractor is designed with Tianlong's innovative Rotary Mixing Technology (RMT) which is rapid 360° rotating and mixing based on the slow up-and-down reciprocating motion. This patented technology (Patent No. ZL201710435931.8) can minimize the risk of cross-contamination caused by nucleic acid aerosols while being super quiet during operations. Also, flexible options of extraction modules based on magnetic beads can meet the needs of various downstream applications.



Technical principle of nucleic acid extraction

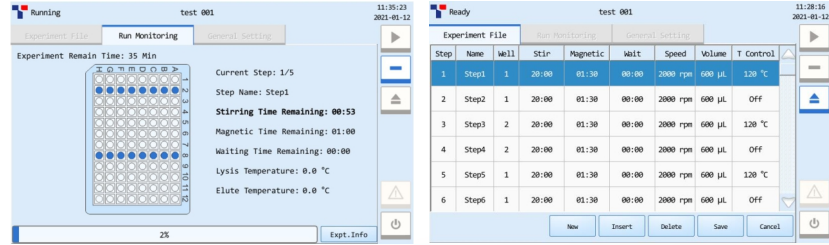
## Reliable Quality - International Registrations and Certifications

GeneRotex 96/48 nucleic acid extractor has been approved and certified in China, EU, US, South Korea, UK, Ukraine, Indonesia and other countries and regions.



### Friendly interface, easy to use

Built-in 7-inch full-color LCD screen; touch-screen operation; or scan the code to start experiment.



### Flexible options of extraction modules

#### 96 sample throughput:

The innovative 6\*16 extraction module, compatible with Tianlong 96-deep-well plates and 6-tube strips, can ensure the high-throughput extraction without the conventional inconveniences caused by fixed throughput and waste of reagents. From now on you can choose between 1-96 as you wish.

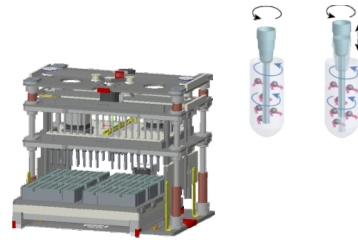
#### 48 sample throughput:

A large-volume extraction solution with 1mL sample volume, with Tianlong compatible consumables, can effectively guarantee highly sensitive downstream detection, especially suitable for low-viral-load sample detection or multiplex detection.

### Stringent contamination control

#### Rotary mixing

To minimize aerosol generated during your assays, GeneRotex 96/48 is designed with Tianlong's innovative RMT which can reduce aerosol generated during the experiment compared with the conventional oscillatory mixing, and can minimize the risk of false positives caused by cross-contamination and ensure the accuracy of experimental results.



#### Negative pressure system with HEPA filtration

The negative-pressure ventilation design with replaceable High-Efficiency Particulate Air (HEPA) filtration can ensure that the exhausted air is free of any biological hazards.

#### UV Disinfection

You can also set the instrument self-disinfection with the built-in ultraviolet lamp according to your lab schedule.



# Features



### Automated Hatch

With the separate motor-drive unit, there is no need for any manual opening and closing of the hatch, to minimize human exposure to potential bio-hazards and reserve space for automated sampling instruments.

### Ultra-quiet design

GeneRotex Series instruments are super mute during operations with the innovative rotary mixing technology and product design.

### Open compatibility

GeneRotex 96, the star product of the fifth-generation automated nucleic acid extraction instruments of Tianlong, inherits the classic 96-deep-well plate and the innovative 6-tube strips, and is compatible with Tianlong extraction kits of all types and specifications. Moreover, GeneRotex 48 is compatible with large-volume nucleic acid extraction kits and can greatly improve detection sensitivity and extraction efficiency.



### High efficiency

The nucleic acid recovery rate is  $\geq 95\%$ ; the residual amount of magnetic beads is  $\leq 1\%$ ; and the detection rates of 10 IU/mL HBV and 30 IU/mL HCV are both  $\geq 98\%$ .

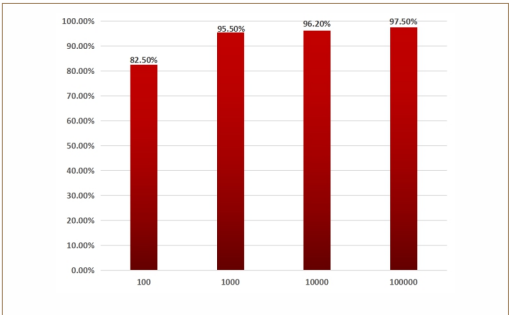


Figure 1: Nucleic acid recovery rate (HBV nucleic acid sample concentration is  $10^2$ ,  $10^3$ ,  $10^4$ ,  $10^5$  IU/mL)

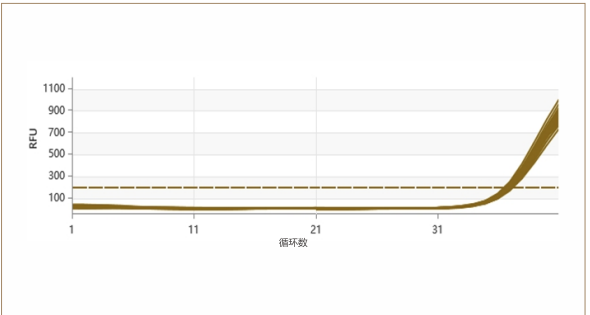


Figure 2: 30 IU/mL HCV detection rate (40/40)



■ SPECIFICATIONS

Model	GeneRotex 96	GeneRotex 48
Throughput	1-96	1-48
Processing Volume	30-1000μL	50-3000μL
Recommended Sample Volume	200μL	1000μL
Suitable Consumables	96-deep-well plates Customized 6-tube strips	Customized 48-deep-well plates
Rotational Speed	≤3000rpm	≤3000rpm
Heating Temperature	Lysis heating: room temperature to 120℃ Elution heating: room temperature to 120℃	
Mixing Method	Rotational mixing	
Operating Language	2 Built-in operating languages: Chinese and English; easy switch	
Operation Mode	7-inch full-color LCD touch screen, or app control via a scanner	
Program Storage	Up to 1000 programs with the built-in modules	
Program Management	Programs can be created, edited, applied and deleted with high flexibility	
Automated Hatch	Motor-driven automatic opening and closing of the experiment cabinet	
QR Code Scanning	With the connection to an external scanner, applications can be automatically recognized and controlled with one click	
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	AC 100V-240V, 50/60Hz; 600VA	

■ AREAS OF APPLICATIONS

In molecular biology experiments, the isolation and purification of nucleic acids are the essential steps. Tianlong GeneRotex Series nucleic acid extractors can process 1-96 samples within one run, and is applicable for the sample pre-processing and handling in various areas such as disease prevention and control, animal epidemic control, clinical diagnostics, entry-exit inspection and quarantine, food and drug administration, forensics, scientific research and education, etc.



GeneRotex 96 in China-Japan Friendship Hospital (Beijing, China)



GeneRotex 96 Used for Cold-Chain Food Safety Testing (CCTV "Topics in Focus" Report)



Dubai customers purchasing GeneRotex 96 Extractors and supporting reagents



GeneRotex 96 in China CDC Lab (Xinhua News Agency)

Nucleic Acid Extractor

