



Consistent
Customer-First Service



Professional Technical
Support Team



Worry-Free
After-Sales Services

Xi'an Tianlong Science and Technology Co., Ltd.

Address: No.4266, Shanglin Road, Economic & Technological
Development Zone, Xi'an, 710018, Shaanxi, P.R. China
Tel: +86-29-86667 5008
Fax: +86-29-8221 6680
http: //www.medtl.net
Email: info@medtl.com

Suzhou Tianlong Bio-technology Co., Ltd.

Address: 5F, Block 7, Northwest Zone of Nanopolis Suzhou,
No.99 Jinji Lake Avenue, Suzhou Industrial Park,
Suzhou City, Jiangsu Province, China
Tel: +86-512-6252 7726
Fax: + 86-512-6295 6337
http: //www.medtl.cn



The right to change product design and specifications are reserved by Tianlong. Printed in Dec. 2022(First Edition)

[NMPA | FDA | CE]



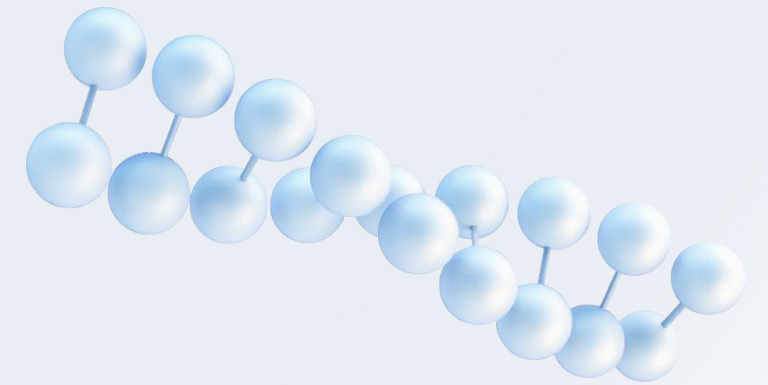
Gentier 96E/96R

Real-Time PCR System



TAILORED FOR HIGH-END
LABORATORY NEEDS

**Bring
Technology
to Life**

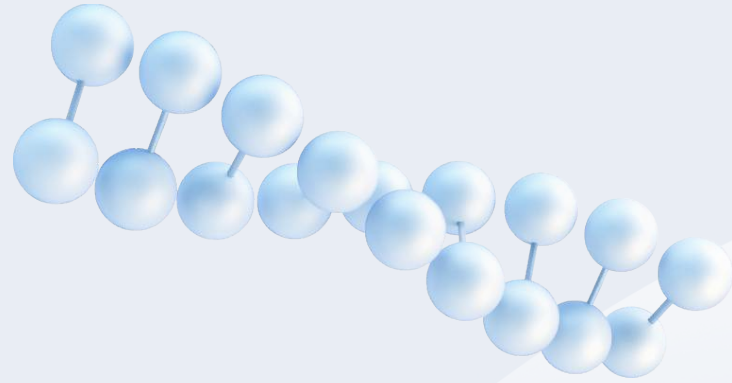


Gentier 96E/96R Real-Time PCR System

Gentier 96E/96R Real-Time PCR System is designed to meet the experimental needs of high-end laboratories. For its excellence in quality and performance, it is included in the Catalogue of Excellent Domestic Medical Equipment released by China Association of Medical Equipment. With the 6 (96E)-/4 (96R)- fluorescence channels, Gentier 96E/96R can process 96 samples in one run. Various downstream applications including multiplex gene qualitative detection, quantitative analysis, SNP analysis, and melting curve analysis, can be carried out easily with the powerful and efficient temperature control system and fluorescence system, easy-to-use software, user-friendly operational designs.

DESIGNED FOR HIGH-END USERS

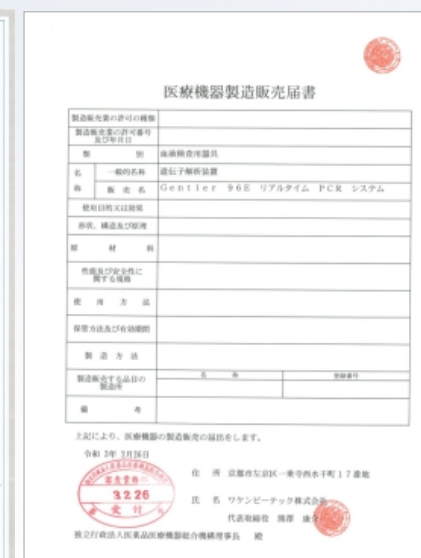
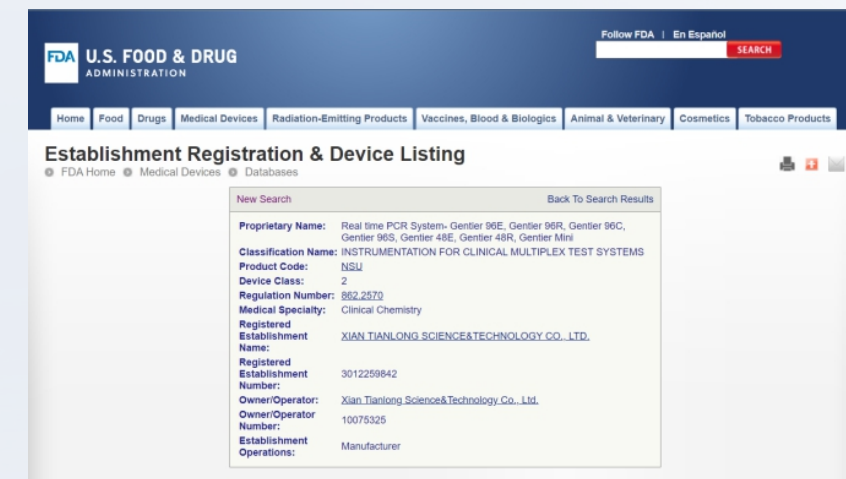




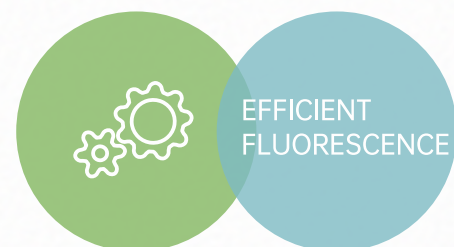
Your *ideal* choice
for Real-Time PCR

Reliable Quality - International Registrations and Certifications

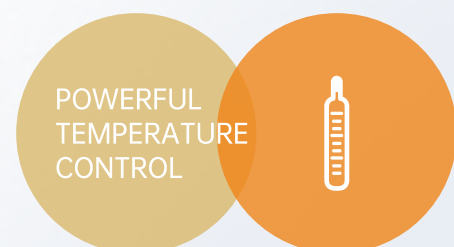
Gentier 96E/96R Real-Time PCR System has been approved and certified in China, EU, US, UK, Ukraine, Indonesia, Malaysia, Colombia, Japan and other countries and regions.



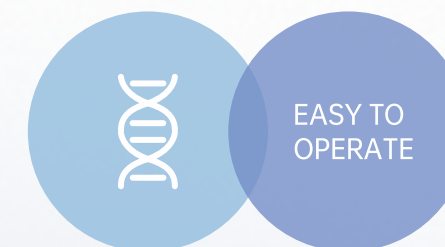
FEATURES



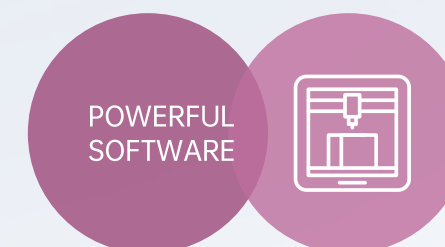
The 6 (96E)-/4 (96R)- fluorescence channels compatible with most of the common fluorescent dyes and probes of regular detection reagents. Specifically, the FRET (Fluorescence Resonance Energy Transfer) channel enables lower background fluorescence value and higher sensitivity for your detection needs. Also, the high-brightness, long-life LED light source can be maintenance-free for life.



The maximum heating ramp rate is $\geq 6.1^{\circ}\text{C/s}$, and the maximum cooling ramp rate is $\geq 5.0^{\circ}\text{C/s}$, for quicker completion of your assays; the temperature accuracy is $\leq 0.1^{\circ}\text{C}$ to ensure accurate results.



Automated sample chamber; cloud-enabled control from PC via network connection; or stand-alone operation with the built-in 10.4-inch touch screen; data storage of at least 1,000 experiments within the instrument.

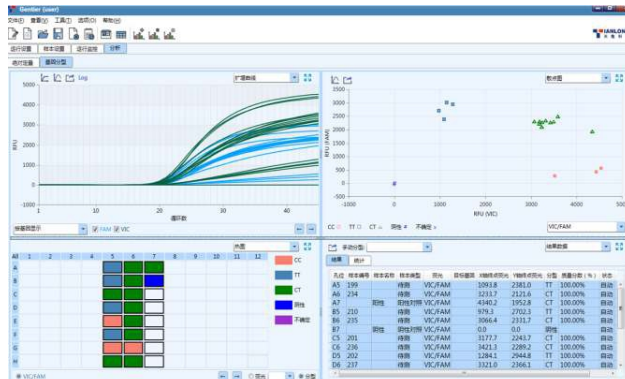


Capable of various data analyses to meet the needs of most experiments, including qualitative analysis, absolute quantitative analysis, relative quantitative analysis, end-point fluorescence analysis, melting curve analysis, etc. Featured Power Failure Protection design, no more concern about instantaneous power failure.

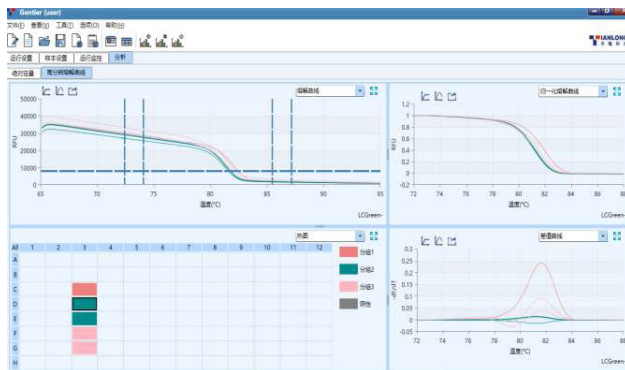
DATA DISPLAY



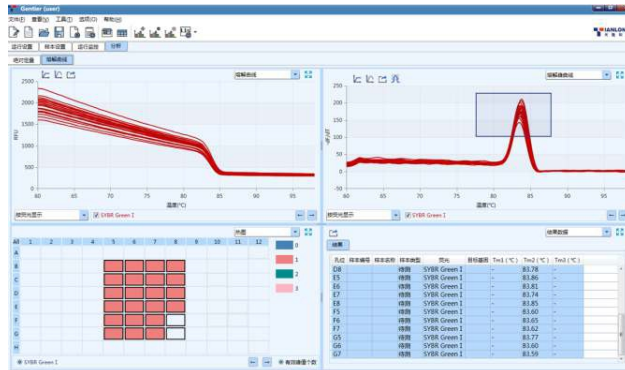
Consistency



Endpoint Fluorescence Genotyping



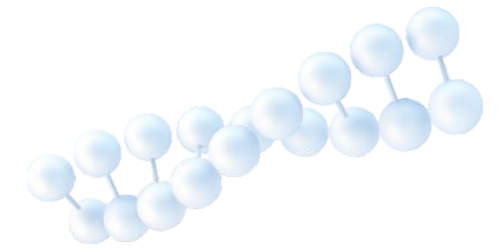
Melting curve analysis - Example 1



Melting curve analysis - Example 2

AREAS OF APPLICATION

Gentier 96E/96R Real-Time PCR System is designed for experimental analyses characterized by Polymerase Chain Reaction (PCR) for the purpose of DNA/RNA detection, and can be widely used in a variety of areas including clinical diagnosis, epidemiological monitoring, food safety, forensics and scientific research, etc.

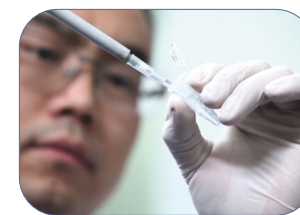


CLINICAL DIAGNOSIS



FORENSICS

FOOD SAFETY



SCIENTIFIC RESEARCH



EPIDEMIOLOGICAL MONITORING

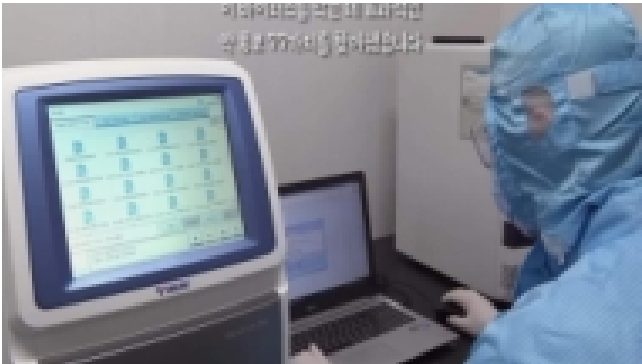


GENTIER 96E/96R IN CUSTOMER APPLICATIONS

With Gentier 96E/96R Real-Time PCR System has been proudly serving Tianlong customers including thousands of medical institutions, CDCs, customs, food & beverage enterprises, forensic institutions, universities and research institutes in over 50 countries around the world, and has received unanimous praise from customers.



China National Biosafety Laboratory (CCTV News)



A disease control center in South Korea



Customized for an IVD company (Singapore)



A medical center in Kazakhstan



China-Japan Friendship Hospital (Beijing, China)



Tongji Hospital (Wuhan, China)

SPECIFICATIONS

Model	Gentier 96E			Gentier 96R	
Sample Throughput				96	
Fluorescence Channels	6			4	
Compatible Fluorophores	Channel 1: FAM, SYBR Green I , SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE Channel 3: ROX, Texas Red Channel 4: Cy5 Channel 5: Alexa Fluor 680 Channel 6: FRET			Channel 1: FAM, SYBR Green I , SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE Channel 3: ROX, Texas Red Channel 4: Cy5	
Excitation Wavelengths	CH1: 465nm CH4: 632nm	CH2: 527nm CH5: 680nm	CH3: 580nm CH6: 465nm	CH1: 465nm CH3: 580nm	CH2: 527nm CH4: 632nm
Detection Wavelengths	CH1: 510nm CH4: 664nm	CH2: 563nm CH5: 730nm	CH3: 616nm CH6: 616nm	CH1: 510nm CH3: 616nm	CH2: 563nm CH4: 664nm
Light Source	High-brightness, long-life and maintenance-free LED light source, excitation from the top				
Detector	Photodiode (PD Camera), top scanning				
Heating Rate	Maximum heating ramp rate $\geq 6.1^{\circ}\text{C/s}$; Average heating ramp rate $\geq 4.5^{\circ}\text{C/s}$				
Cooling Rate	Maximum cooling ramp rate $\geq 5.0^{\circ}\text{C/s}$; Average cooling ramp rate $\geq 2.8^{\circ}\text{C/s}$				
Temperature Uniformity	$\pm 0.1^{\circ}\text{C}$				
Temperature Accuracy	$\leq 0.1^{\circ}\text{C}$				
Thermal Range of Temperature Control Module	0°C to 100°C				
Thermal Range of Hot Lid	40°C to 110°C				
Limit of Detection	$1\sim 10^{10}$ Copies				
Thermal Gradient (YES/NO)	YES (Gradient Span: 40°C)				
Fluorescence Scan Time	7 sec				
Temperature Control Method	Peltier				
Dynamic Range of Fluorescence Detection	Can be adjusted to fit reagent				
Special Temperature Setting Function	Support thermal gradients PCR, Long PCR, Touch Down PCR				
Suitable Consumables	0.2 mL 96-well plates, 8-tube strips, single tubes (clear, frosted and white)				
Sample Testing Linearity and Repeatability	Linear Correlation: $r \geq 0.999$ Repeatability: cycle threshold (Ct) value CV $\leq 0.5\%$				
Software Analysis	Qualitative analysis, absolute quantitative analysis, relative quantitative analysis, end point fluorescence analysis, melting curve analysis, and genotyping analysis, etc.				
Control Method	Stand-alone operation: 10.4-inch touchscreen control Cloud-enabled: PC software control via direct connection or LAN (local area network)				
Power Failure Protection	Automatic recovery of the experiment and other functions when the power is on again after cutting off, without waiting for the power-on of the computer or software control				
Data Storage and Transmission	A single machine can store more than 1000 experimental data files, which can be imported and exported via USB disks				
Reporting Function	Built-in experiment report templates for a variety of industries; Fully open universal reporting of which the contents and formats can be customized				
Operating System for PC	Win 7, Win 10				
Instrument Dimensions	355mm \times 475mm \times 484mm (W \times L \times H)				
Weight	30kg (net)				
Power Supply and Power Consumption	AC 100-240V; 50-60Hz; 900VA				