

Real-Time PCR Thermal Cycler

Product Number: Q9600

Description

Q9600 is a high-throughput real-time PCR instrument developed by our company. It adheres to the principles of high efficiency and quality, combined with the advanced temperature control system and optical system, as well as powerful software analysis functions. It can realize applications such as qualitative/quantitative analysis, genotyping, allele identification, HRM, melting curve analysis and etc. The product adopts side scan technology and all channels are collected at the same time. 96 samples can be scanned within 5 seconds to save the test time. This product has powerful software and hardware functions to meet the different needs.



Features

1. 12.1" retractable color touch screen, the screen angle can be adjusted.
2. Configure automation hot lid, can be used with automation workstation, improve work efficiency.
3. Unique side scan technology, all channels can be detected simultaneously, complete the scan of all fluorescent channels of 96 samples within 5S.
4. LED light source has the advantage of energy saving, environmental protection, long service life and maintenance free.
5. Powerful software analysis functions can perform qualitative/quantitative analysis, high-resolution melting curve, genetic typing, relative quantitative, temperature gradient function, etc.

Application

1. Scientific Research: Research institutions and molecular clones, gene expression, and genotyping of various colleges and universities.
2. Clinical Diagnosis: Medical institutions perform pathogen testing, genetic screening, various infectious diseases, tumor diagnosis, etc.
3. Animal husbandry agriculture: Environmental testing, pesticide residues and soil testing.
4. Pet medicine: Detectives of various pet pathogens (such as avian influenza, foot-and-mouth disease, swine fever, etc.) and health monitoring.
5. Food Safety: All kinds of food microbial detection, allergens, genetically modified food, real and false meat identification, etc.
6. In vitro diagnosis: Reagent development, verification, regeneration drugs, etc.

Parameters

1. Specification

For Research Use Only

Component	Q9602	Q9604	Q9606
Sample Capacity	96 well, 12×8 strip, 96×0.2mL single tube		
Formats	0.1/0.2mL single tube, 0.1/0.2mL 8-tube strip, 0.1/0.2mL non-skirt, semi-skirt 96-well plates (0.2 ml recommended)		
Reaction Volume	10-100μL		

2. Temperature Control Performance

Temperature Range	0-100°C
MAX. Ramp Rate	8°C
Temp. Fluctuation	≤±0.1°C
Uniformity	≤±0.2°C
Accuracy	≤±0.1°C
Gradient Spread	0.1-42°C
Hot Lid Temperature	30°C-115°C(Adjustable, default 105°C)
Temperature Control	Block/Tube

3. Optical Performance

Excitation Wavelength	300-810nm		
Emission Wavelength	500-810nm		
Detection Channel	2channel	4channel	6channel
Detection Method	All channels scan at the same time		
Scan Period	5 seconds to complete 96 well test		
Factory Calibrated Dyes	F1: FAM/SYBR /EVA F2: HEX/VIC/JOE/ TET/YELLOW	F1: FAM/SYBR /EVA F2: HEX/VIC/JOE /TET/YELLOW F3: ROX/TEXAS RED F4: CY5	F1: FAM/SYBR /EVA F2: HEX/VIC/JOE/ TET/YELLOW F3: ROX/TEXAS RED F4: CY5 F5:LCRED/Quasar705/CY5.5 F6: CY3/TAMRA(Customize)
Excitation	Long life LED		
Detection	High sensitivity photoelectric detector		
Dynamic Range	1-10 Copies		
Sensitivity	1 copy		

4. Control System

Lid Operation	Automatic hot lid
Feature Function	Qualitative/absolute quantification, relative quantitative, genotyping, HRM, melting curve, standard curve, allele identification, temperature gradient function, etc.
Data Management	Audit Trail System
Operation System	Win7, Win10, Win11
Remote Monitoring	Can connected to laboratory management system
Automation Platform	Can be used with automated workstations
Date Export Formats	xls, csv, txt, pdf, jpg

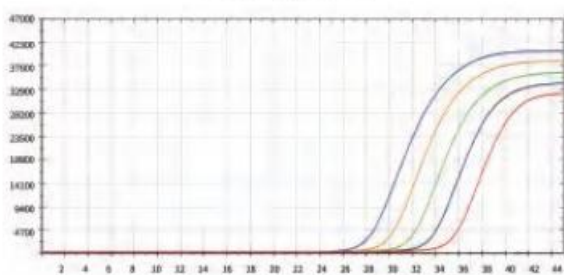
Printing	Report can be printed directly
Control Method	12.1-inch retractable color touch screen control or connect to computer control
Communication	USB2.0, RS232

5. Other Performance

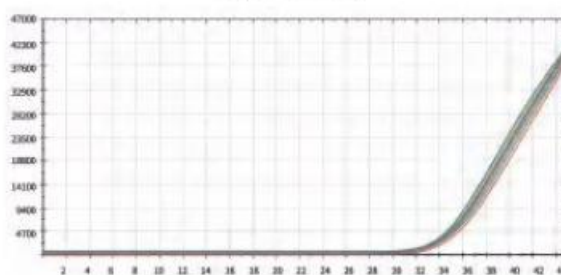
Weight	32KG
Voltage	100-220VAC, 50-60Hz
Power	1500W

Software analysis

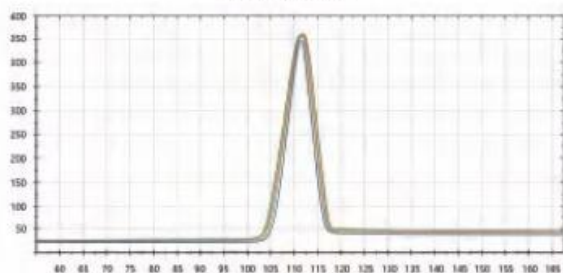
Melting Curve



Repeatability



Genotyping



Gradient Linear

