



Lava96

Real-time PCR Detection System





Model: DA8120

Lava96

Lava96 Real-time PCR Detection System is based on real-time fluorescent PCR technology and is used together with Daan's reagents to perform qualitative and quantitative detection of target nucleic acids (DNA/RNA) in samples.

It combines advanced optical system with precise temperature control to provide stable, reliable analysis of 1 to 96 samples.

Features



- 12.1 inches color touch screen
- Linux software

Open platform

- * Compatible with 0.2mL single tube, 8-strip tube and 96-well plates.
- · Flexibility to adjust testing programs.
- Support FAM/VIC/ROX/Cy5 fluorescent channels.



- Advanced optical system enables signal acquisition with high sensitivity and efficiency.
- 4-plex integrated optical path, wide wavelengths, without crosstalk between channels.
- Long-lasting high intensity LED, high stability, maintenance-free.

Precise temperature control

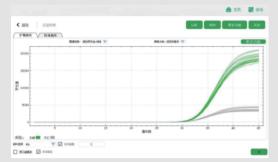
- Well-to-well temperature uniformity with an accuracy of ±0.5.
- Ultra-fast heating rate of up to 4.5/s.
- Intelligent temperature control algorithm, rapid temperature control.
- Constant temperature operation function.
- · Qualitative analysis, absolute quantification analysis.
- Melting curve analysis.
- Pre-set experimental program, real-time monitoring.
- · Break-point resume function.

Intellgient continuation



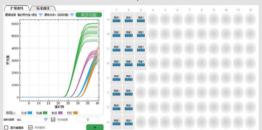
Excellent repeatability ensures stable and reliable results

Positive control substance, the concentration is 10³ IU/mL, qPCR analysis after sample extraction, CV<3%.



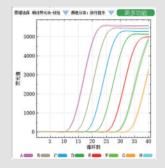
Excellent multi-color fluorescence detection to ensure multiple data requirements

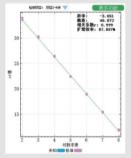
Positive quality control, 4-plex detection without crosstalk between channels, CV<3%.



Excellent linear range for accurate quantitation

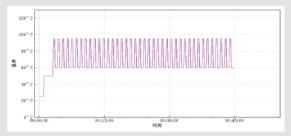
HBV reference substance, the dilution concentration is 10^2 - 10^8 IU/mL, after extraction, R2>0.999.





Precise temperature control capability, excellent uniformity and stability

Real-time and precise temperature control according to different programs.



Parameters

General information	
Test principle	Real-time fluorescent PCR technology
Throughput	1–96 samples
Reaction volume	5~100μL
Fluorescence dyes	F1: FAM, SYBR GREEN
	F2: VIC, HEX, JOE, TET
	F3: TEXAS-Red/ROX
	F4: CY5
Applicable consumables	0.2mL single tube, 8-strip tube and 96-well plates

Performance	
Sensitivity	1 copy
Sample detection repeatability	CV≤3%
Fluorescence detection precision	CV≤5%

Thermal cycle system	
Heating and cooling method	Peltier
Lid range	Room temperature to 110°C
Heating rate	≥4.5°C/s
Cooling rate	≥3.0°C/s
Temperature range	0-100°C
Temperature uniformity	±0.5°C

Optical system	
Excitation light source	LED
Detector	Photodiode
ROX correction	No need
Filters	Excitation wavelengths(nm): 465, 525, 571, 638; Emission wavelengths(nm): 510, 564, 612, 685

Software	
Operating system	Linux
Display	12.1 inches color touch screen
Inter-connection	Bidirectional LIS connection
Storage	Over 10000 files
Function	Qualitative analysis, Absolute quantification qnalysis, Melting curve analysis Custom settings editor, Pre-stored experimental program, Real time monitoring, Abromal alarm

Working conditions	
Operating environment	Temperature: 10°C-30°C, Relative Humidity: ≤70°C
Atmospheric pressure	85.0kPa~106.0kPa
Power supply	AC220V 50Hz
Input Power	1500VA
Communication interface	RS232, RJ45, USB
Dimension(L×W×H)	337mm× 534mm × 398mm
Weight	28.9 kg

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