

LineGene K

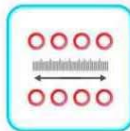
Real-Time PCR Detection System

Real-Time PCR Detection System

Just for you!
13 items 



Volume adaptation—software automatically adjusts heat exchange to differences in sample volumes.



New multipoint temperature monitoring allows more accurate and uniform temperature control throughout the heating block.



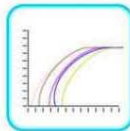
Gradient function—creates a temperature gradient across the sample block. Maximum 24°C difference between row 1 and row 24.



Sample preservation—after completion of experiment, the system can automatically refrigerate samples until they are moved to storage.



Use of direct current power supply improves thermal efficiency and reduces power consumption by 30%.



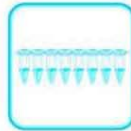
Improved optics—greater efficiency in fiber optic system provides reduced signal to noise ratio.



Automatic hot lid—provides constant pressure and software-managed temperature control.



Configuration upgradable—manual versions of the instrument can be upgraded to automatic. Systems can be upgraded from 1 wavelength to 4 wavelengths.



Multiple tube styles—the sample block will accept several styles of 0.2ml tubes including 8-tube strips.



Automatic amplitude adjustment—the instrument detects the fluorescence strength in the samples and automatically adjusts to the correct system sensitivity.



New software—a new generation of LineGene software provides even greater convenience and more powerful functions.



Upload software instructions—define experiment instructions with easy-to-use PC-based software, then upload to instrument.



Overheating protection—if the operating environment exceeds the temperature range for operation within specification, the instrument will shut down. At 35°C the instrument will sound a warning; it will turn off at 40°C.

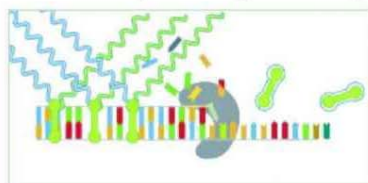
Fluorescence detection system

Sensitivity:

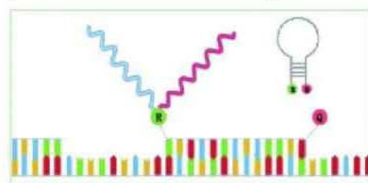
High performance PMT with high sensitivity;
 Unique bottom detection mode can shorten light length and strengthen sensitivity

Convenience:

Long-lived LED excitation light source does not need maintenance or preheating.
 Automatically detecting and multiple groups of filters to detect many kinds of fluorescence simultaneously.



Fluorescence Dye



Molecular Beacon



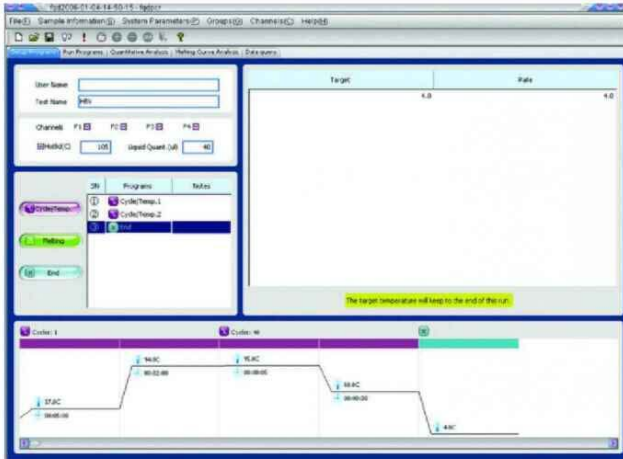
TaqmanProbe

LineGene K

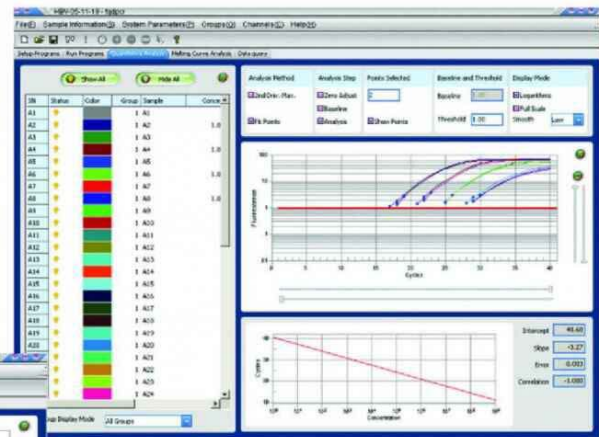
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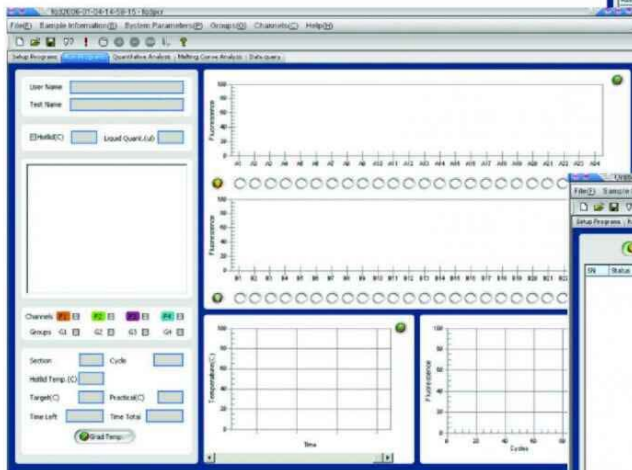
Interface Introduction:



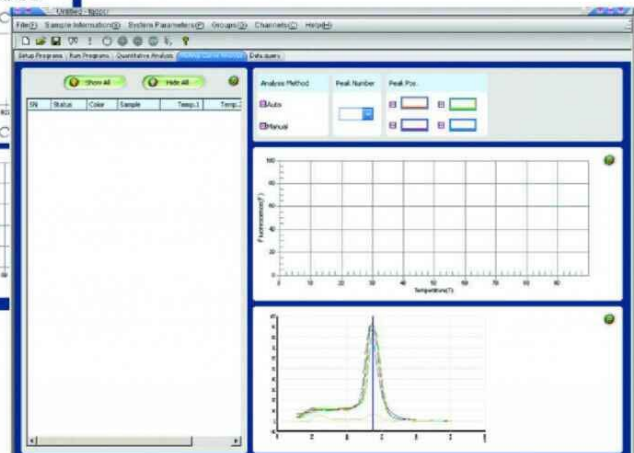
Software Programming



Quantitative analysis



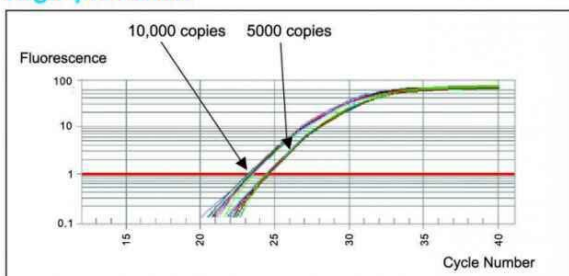
Running interface



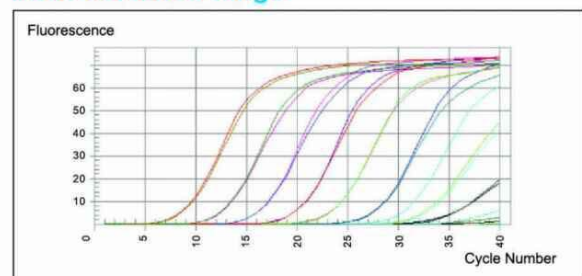
Melting curve

Software:

High precision



Wide detection range



SNPs Detection

Line-Gene system is a multicolor fluorescence detection system and can carry out the detection analysis of SNPs.

Two kinds of data analysis methods:

Analysis Method	Analysis Step	Points Selected	Baseline and Threshold	Display Mode
<input checked="" type="checkbox"/> 2nd Deriv. Max.	<input checked="" type="checkbox"/> Zero Adjust	<input type="text" value="2"/>	Baseline <input type="text" value="1.00"/>	<input checked="" type="checkbox"/> Logarithmic
<input checked="" type="checkbox"/> Fit Points	<input checked="" type="checkbox"/> Baseline	<input checked="" type="checkbox"/> Show Points	Threshold <input type="text" value="1.00"/>	<input checked="" type="checkbox"/> Full Scale
	<input checked="" type="checkbox"/> Analysis			Smooth <input type="text" value="Low"/>

2nd Derivative Maximum:

This method automatically calculates the maximum second derivative value of every fluorescent curve and defines this value as the Ct value.

Fit Points:

The user sets baseline and a threshold values then draws a threshold line. Based on user instructions, the software will select a number of sample points on the fluorescence curve that are above baseline and in the logarithmic phase into a line. The intersection of this line with the threshold line is defined as the Ct value.

Specifications:

Model	FQD-48A(A4) <small>(A4: means automatic lid and 4 channels)</small>	FQD-48A(M2) <small>(M2: means manual lid and 2 channels)</small>
Sample Capacity	48×0.2ml	48×0.2ml
Sample Volume Range	10~100 µl	10~100 µl
Dynamics Range	1~10 ¹⁰ Copies	1~10 ¹⁰ Copies
Max. Channel Number of Fluorescence Detection	4 Channels	2 Channels
Excitation Wavelength (450-590nm)	Standard channels: F1:470nm F2:523nm F3:543nm F4:571nm	F1: 470nm F2:523nm
Emission Wavelength	Standard channels: F1:525nm F2:564nm F3:584nm F4:612nm	F1: 525nm F2:564nm
Detected Fluorescence	F1: FAM, SYBR Green I F2: HEX, VIC F3: TAMRA, JOE, Cy3 F4: TEXAS-RED, ROX	F1: FAM, SYBR Green I F2: HEX, VIC
Temp. Range	4°C~99.9°C	4°C~99.9°C
Heating Rate (Max)	≥4.0°C/sec	≥4.0°C/sec
Cooling Rate (Max)	≥4.0°C/sec	≥4.0°C/sec
Temp. Uniformity of Block	≤±0.3°C	≤±0.3°C
Temp. Control Accuracy	≤±0.1°C	≤±0.1°C
Gradient Temp. Range	1°C~24°C	1°C~24°C
Hot-lid Temp. Range	80°C~110°C	80°C~110°C
Operation System	Windows 2000/XP	Windows 2000/XP
Power Supply	AC110~220V 50Hz/60Hz 650W	AC110~220V 50Hz/60Hz 650W
Dimension (mm)	520×450×320(L×W×H)	520×450×320(L×W×H)
Net Weight	25kg (Without Computer)	25kg (Without Computer)
Certificates	Ferrotec Peltier / MET / CE / RoHS / CE-IVD	

* Total Volume: 48×0.2ml