



ES-BK/96P

Fluorescence Quantitative
PCR detection system



LABORATORY



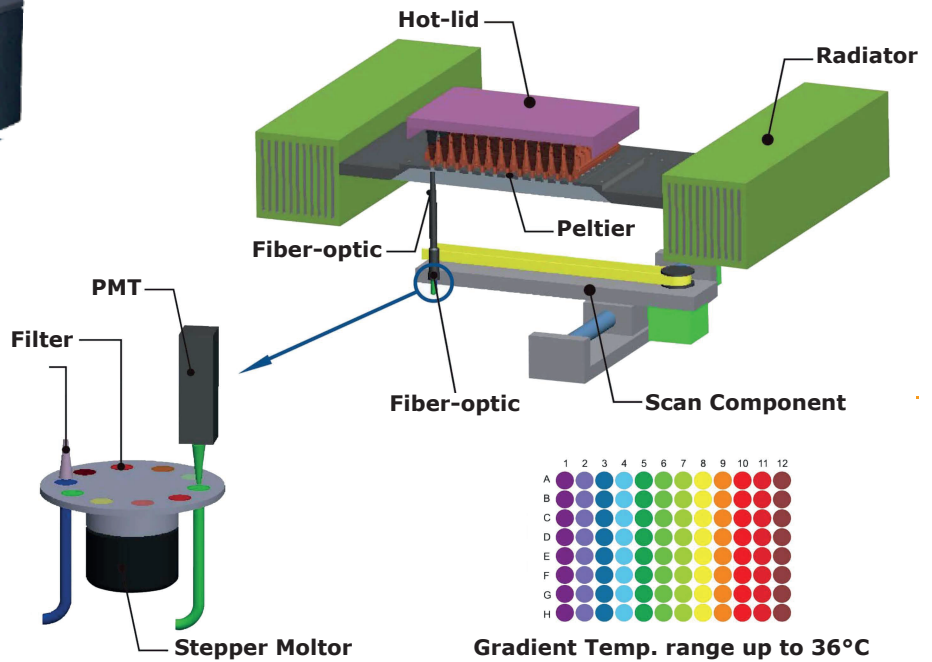
ES-BK/96P

Fluorescence Quantitative PCR Detection System



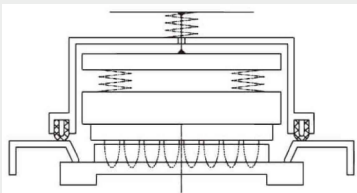
ES-BK/96P is the newest product for Real-Time PCR detection system family. It performs 96 sample capacity, 5 detection channels and wider temperature range. Adopting newest Peltier fiber optic Technology and a new global wide range power supply, the highly improved instrument is available for a variety of scientific research and clinical applications.

Working principle



Hardware article

The hot-lid applies a new method of frame pressing. Six springs are distributed on the block in regular intervals. The pressure frame presses on the springs and the springs force on the block to ensure the uniformity of pressure. Moreover, the hot-lid has a perfect sealing design. The new design of pressure frame has rubber pad embedded around the edge, and it tightly wraps the aluminium heating plate and forces on it to create a sealed space around the block. This new design avoids the convection of hot and cold air around the block so that the good dynamic uniformity of block temperature is achieved.



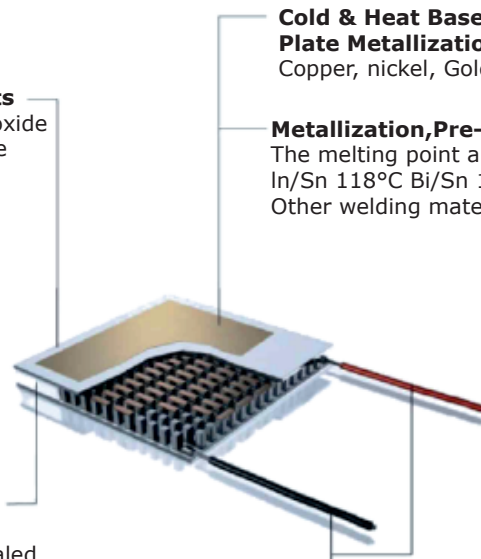
TE refrigeration using 72 long life series, the process in TE base plate and the semiconductor substrate using the new adhesive technology, make the TE also work normally under high humidity environment. and greatly improve the service life of the TE piece at the same time, through the experiment testing TE refrigerationservice life greatly increased.

Base Plate Parts
96% aluminum oxide
aluminium nitride

Cold & Heat Base Plate Metallization
Copper, nickel, Gold

Metallization, Pre-tin
The melting point and the solder joint
In/Sn 118°C Bi/Sn 138°C
Other welding material designated

Moisture Proof Protection
RTV silica gel sealed
ethoxytine resin sealed
(to 80°C)

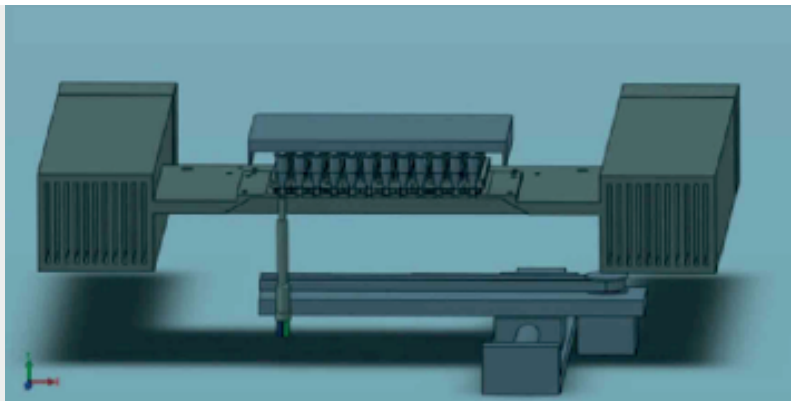


Conductor Wire
Normative: Teflon 133m
Optionai: Bore wire or PVC insulated wire
Length: Customer specified



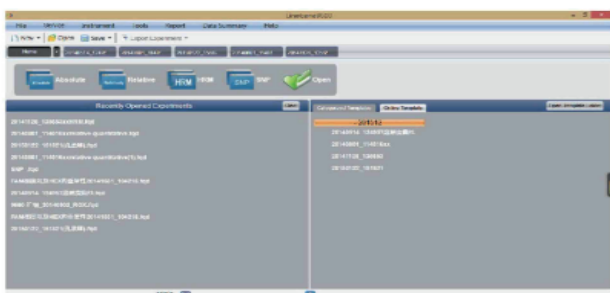
The one at the bottom of the unique scanning, effectively prevent interference each other

- Use long life of LED light source. It doesn't need to maintain
- Advanced optical fiber transmission technology makes photoelectric detection system more sensitive and reliable.
- Precision optical path system combined with ultra high sensitivity of PMT system, makes the fluorescence detection more accurate and sensitive.



Software

- English interface, flexible program setting, comprehensive analysis and reporting functions, all the parameters can be stored
- Can print multiple or single sample report
- Remote network provides the most advanced technical support for real-time PCR detection system
- Support Windows tablets
- Support RS232, USB, Bluetooth interface



Software Interface

ES-BK/96P software Includes Absolute Quantification, Relative Quantification, SNP Analysis, HRM Analysis function modules. With the preset programs, the user can set up experiments simply and fast.



Many software programs give customers a variety of operating experience and meet customers' various selection.

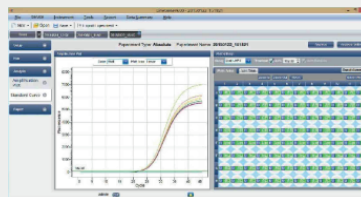
Operation interface

We can see the real-time temperature curve, application process and real-time fluorescence signal to master the experimental progress



Software analysis interface

Three different algorithms ensure the accuracy of Ct value analysis. The user can use standard reference set up in the experiment to generate standard curve and analyze the result and save experiment resources

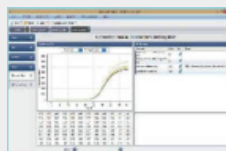


Consolidates report



Basic experiment information, experiment process, plate diagram and amplification curve can be put into the report, which makes it clear and unambiguous.

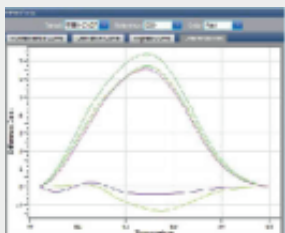
QC report



Saveguarding the accuracy of your experiments

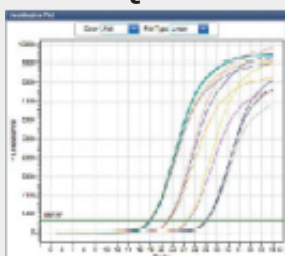
Technical Parameters

HRM



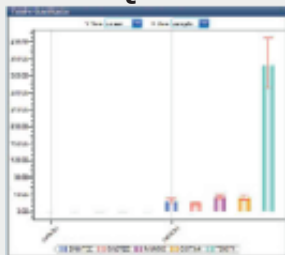
Two templates with one base pair difference in triplicate, the difference is easily recognized.

Absolute Quantitative



Four gradient templates in triplicate, proving good stability

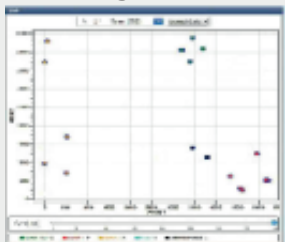
Relative Quantitative



Target genes: DNMT3B, GABRB3, NANDG, OCT3/4, TOGF1

The detection result shows accurate relative quantity of each gene.

SNP



The result shows that different genotypes are obviously distinguished

Sample Capacity	96-well PCR plate, 12x8-strip, 96x0.2ml(Bottom Transparent)
Dynamics Range	1-10 ¹⁰ Copies
Excitation Wavelength	300-800nm
Emission Wavelength	500-800nm
Detected Fluorescence	F1:FAM, SYBR GREEN I F2:VIC,HEX,TET,JOE,CY3,NED,TAMRA F3:ROX,TEXAS-RED F4:CY5 F5:CY5.5 F6:RESERVED FOR CUSTOMIZATION
Block temp. range	4-105°C(Minimum increment:0.1°C) SOAK Low Temp. Conservation Function
Heating/Cooling Rate	4.0°C/s(max)
Temp. Control accuracy	≤ ±0.1°C
Temp. Fluctuation	≤ ±0.1°C
Temp. uniformity	≤ ±0.3°C
Temp. control mode	BLOCK/Tube Simulation Mode (Automatic Control Based On Sample Volume)
Sample Volume Range	5-100μL
Gradient Temp. Range	1-36°C
Hot-lid Temp. Range	30-110°C(Adjustable, Default 105°C), Automatic Hot-lid
Fluorescence Detection Repeatability	5%
Scan Mode	Entire plate of designated line
Program	Max 20 Segments for Each Program, Max 99 Cycles
Operation Mode	Continuous
Scan Period	5.5s
Feature function	Absolute quantification, relative quantification, SNP Analysis, Data automatic analysis, melting curve genotyping, Gradient, multi-channel crosstalk correction, background correction, automatic gain, customized parameters.
Operation system	Microsoft: windows7/windows8.1
PC Configuration	Software:excel2000/2002/2007/2012
Power supply	Memory: 2G Hard disk:32GB
Dimension(LxWxH)	100-240V 50/60Hz 600W
Socket	410x386x352mm
Authentication	USB Adapter, RS232 Adapter, Bluetooth Adapter
Packing size	Peltier/CE(EMC&LVD)/IVD/RoHS2/PICC
Gross weight	Product quality liability insurance
	820x790x680mm
	85KG