labodam

Real Time PCR

LRTP-B Series

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Real time PCR LRTP-B Series comes with 96 well capacity PCR machine with, 1 to 36 ^{0}C gradient temperature range, and fast speed dual colour scanning mode. Its wide fluorescence wavelength range with innovative 2 to 8 channel design, optimizes thermal performance and maximizes convenience during operation. With its unique block dissipation technology, it provides precise temperature control and thermal gradient which easily optimizes PCR assays.

Features

- Ferrotec Peltier cooler with improved efficiency and long life
- Wide range of block temperature (4-105 ^{0}C) with SOAK low temperature function
- 2 to 8 individual filters cover wide range of fluoresence detection wavelength
- Easy data transfer via USB and Bluetooth
- Real time fast double wavelength X-Y scan system
- High long life LED
- Dual high sensitivity PMT (photomultiplier tube) synchronous detection
- Panoramic view of experimental results

Applications

Real time PCR, used in quantification and characterization of nucleic acids in academic institutes, research centres, diagnostics and laboratories.

Specifications

Model	LRTP-B10	LRTP-B20	LRTP-B30
Sample Capacity	96-Well PCR plate, 12×8-strip tubes, 96×0.2 ml tubes (Bottom Transparent)		
Emission Wavelength	500 to 800 nm		
Excitation Wavelength	300 to 800 nm		
Sample Volume Range	5 to 100 μl		
Program	Max 20 Segments for Each Program, Max 99 Cycles		
Dynamics Range	10 to 10^{10} Copies		
Max. channels number of fluorescence detection	2 channels	4 channels	6 channels
Detected Fluorescence	F1: FAM, SYBR Green 1; F2: VIC HEX TET JOE	F1: FAM, SYBR Green 1; F2: VIC, HEX, TET, JOE; F3: CY3, NED, TAMRA; F4: ROX, TEXAS-RED	F1: FAM SYBR Green I; F2: VIC HEX TET JOE; F3: CY3 NED TAMRA; F4: ROX TEXAS-RED; F5: Cy5; F6: ht cycler red
Block Temp. Range	4 to 105 °C (Minimum Increment: 0.1 °C), SOAK Low Temp. Conservation Function		
Temp. Control Accuracy	≤ ± 0.1°C		

Temp. Fluctuation	≤ ± 0.1 °C
Temp. Uniformity	≤ ± 0.3 °C
Ramping Rate	4.0 °C/sec
Temp. Control Mode	BLOCK/Tube Simulation Mode (Automatic Control based On Sample Volume)
Gradient Temp. Range	1 to 36 °C
Hot-lid Temp. Range	30 to 110 °C (Adjustable, default 105 °C, Automatic Hot-lid)
Fluorescence Detection Repeatability	0.05
Operation Mode	Continuous
Scan Mode	Entire Plate or Designated Line
Scan Period	5.5 sec
Operation System	Microsoft: Windows2000/XP/vista/Windows7 Software: Excel2003/2007 Access: 2003/2007
PC Configuration	Memory: 512M; Hard Disk: 10GB; CPU: Pentium® 4; Virtual Memory: ≥1000 MB
Power Supply	100 to 240 V, 50/60 Hz, 600 W
Dimension (L×W×H)	430 × 395 × 352 mm
Socket	RS 232C Adapter