

Accurate 96 Real-Time PCR System



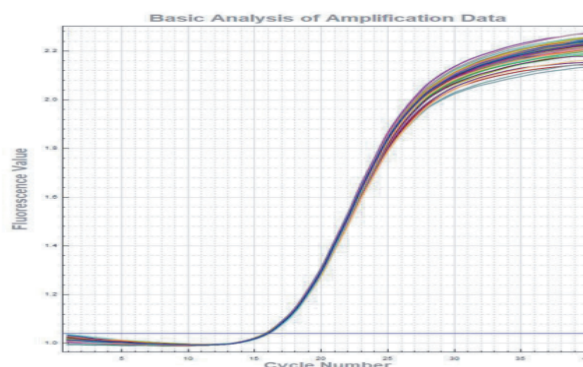
Introductions

As a necessary choice for quantitative analysis of molecular biology, real-time PCR system has been widely used in various fields such as scientific research, clinical detection and diagnosis, quality and safety testing, and forensic applications. Optional accessories (software, peripherals, and consumables).

Features

- Up to 6 fluorescence detection channels allowing multiplex PCR.
- Effectively reduce multi-color crosstalk and edge effect, no ROX correction required to reduce sample and reagent use
- Innovative scanning method and time-resolved signal separation technology to improve detection sensitivity
- Unique edge temperature compensation technology to minimize "edge effect"
- User-friendly software
- Innovative technology with long-lasting LED light provides reliability results formation.

Channel 6	Channel 5	Channel 4
NED/Cy3/TAMRA 543±20/584±20	ROX/Texas Red 571±20/610±20	FAM/SYBR 480±10/518±10
VIC/HEX/TET/JOE 532±10/564±20	CY5/Quasar 670 640±20/692±40	FAM/SYBR 480±10/518±10
Channel 3	Channel 2	Channel 1

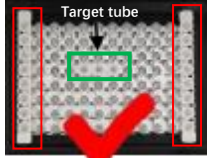
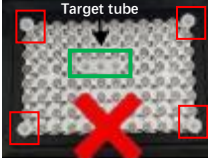
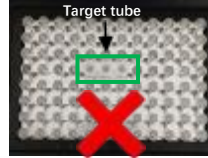
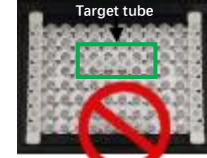
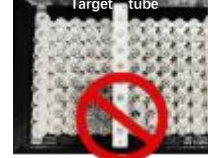
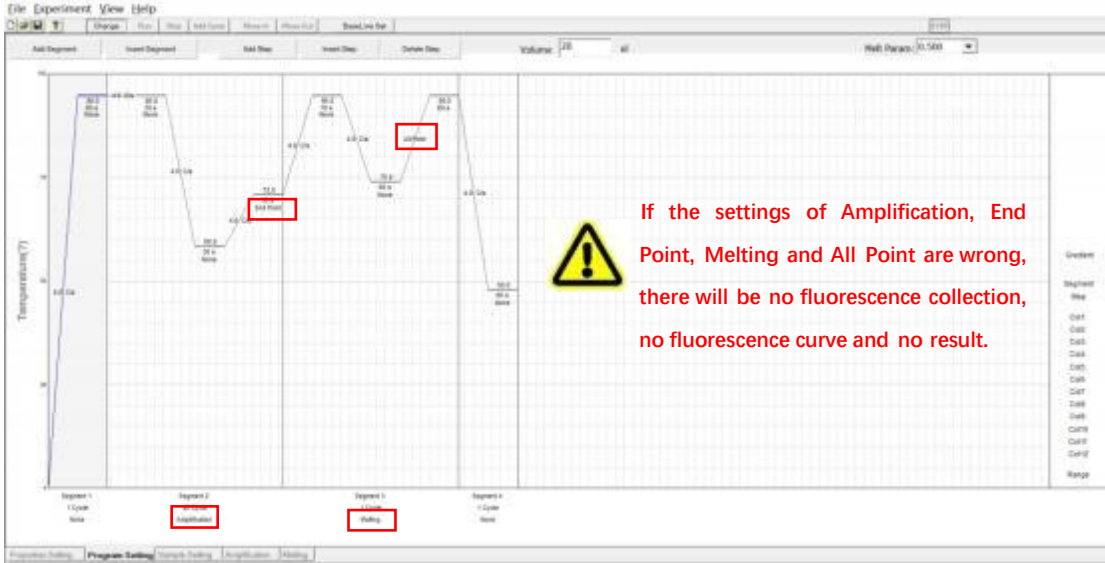


Specifications

Model	Accurate 96
Temperature control system	
Sample capacity	0.1ml PCR tubes×96, 8×12 PCR plate or 96 well plate ×1
Reaction volume	10-50μl
Thermal cycle technology	Peltier
Max. Heating/Cooling rate	6.0° C/s
Heating temperature range	4-100°C
Temperature accuracy	± 0.2°C
Temperature uniformity	±0.2°C @60°C, ±0.2°C @95°C
Temperature gradient setting range	30-100°C
Temperature gradient difference setting range	1-36°C
Detection system	
Excitation light source	5/6 monochrome high efficiency LEDs
Detection device	MPPC
Detection mode	Time-resolved signal separating technology
Excitation/detection wavelength range	455-650nm/510-715nm
Fluorescent channels	4/6 channels
Supported dye	FAM/SYBR Green,VIC/HEX ROX,Cy5,Cy3(only for x6)
Sensitivity	Single copy gene
Resolution	1.33 folds copy number difference can be distinguished in single-plex qPCR
Dynamic range	10 orders of magnitude copies

CAUTION! Accurate96 Operation Notes

Please read the following precautions carefully before using the instrument!

Power Condition		220 V, 50/60 Hz, Voltage fluctuation <10%, the instrument must be well grounded. Warning: Improper grounding may cause electric shock or damage to the instrument.
Data cable		Must use the original cable in the package.
Lock and Unlock		Machine need to be unlocked with the M4 hex wrench upon arrival before other operation. The instrument must be locked before being transported over long distances. See the unlock/lock operation video for details.
Applicable Consumables		Both 100ul white, clear, the equivalent heights 100ul strip/plate tube are applicable with flat cap or optical sealing film. Warning: Forbidden to use consumables of the following two specifications: 1) tubes or 96-well plates higher than 100ul standard height; 2) convex caps. Manufacturer will not take responsible for the damage caused by wrong tubes. If user has demand to use some special consumables, please check with the distributor/ manufacturer before use.
		 100ul-White   100ul-Clear   200ul   200ul- Convex caps 
Consumables placement		Only the same specification PCR tube can be used in same run and tubes should be correctly placed in the corresponding well position. When use few tubes or few strips, place empty 8strips on both sides of block to balance the hot lid is Must.  Target tube Strips on both sides   Target tube Place tubes at corners   Target tube No support tube   Target tube Not in the hole   Target tube Use different kind of Tube 
Computer requirements		- The computer system requires win10 system, - Both the "Screen Off Settings" and "Sleep Settings" of the computer must be turned off.
Software Installation		- The software needs to be installed on the D drive, - Install the USB driver first, and then install the software.
Program settings		The program stage is displayed below the program. 'None' means that there is only heating /cooling, and no fluorescence signal is collected; Set it as 'Amplification' means machine will collect fluorescence signal once per cycle at amplification stage, and "End point" must be set. Set it as 'Melting' means machine will collect fluorescence throughout the heating process at melting stage. "All point" must be set. Type of the program phase must correspond to the fluorescence collection setting.  If the settings of Amplification, End Point, Melting and All Point are wrong, there will be no fluorescence collection, no fluorescence curve and no result.
Sample setting		The fluorescence channels corresponding to different wells position must be set before the experiment. The settings of well position, channel, gene name, and sample name all need to correspond to each other.