

Real-time Fluorescence Quantitative PCR Detection System



AST-FQPCR164I / AST-FQPCR165



AST-FQPCR164II

Feature

It's a 16-well real-time quantitative PCR system. Based on innovative signal acquisition and spectral separation technology, combined with unique temperature control technology, the instrument has reached an advanced level in detection sensitivity, multi-color crosstalk correction, temperature uniformity and accuracy.

The instrument provides 4-channel or 5-channel configurations and is compatible with dye- and probe-based PCR reagents, making it easy to implement multiplex PCR detection. The instrument supports standard analysis methods such as absolute quantification, HRM, MMCA.

Advantage

1. Innovatively designed optical system (AST-FQPCR165)
2. Ultra-fast reaction mode: it adopts innovative data acquisition design and high-speed temperature control system, the detection time of 5-color 16-well can be shortened to 2 seconds, which can minimize the difference in PCR extension time of different wells caused by the detection time. The experiment of 40 cycles can be completed in 20 minutes. The yellow curve is the standard speed of conventional instruments (60 minutes, 40 cycles), and the blue curve is the fast mode (25 minutes, 40 cycles). (Only for AST-FQPCR165)

3. High resolution can distinguish the concentration difference of 1.33 times
 4. Excellent repeatability performance
 5. Up to 10 orders of magnitude dynamic range
 6. Melting curve analysis
 7. Efficient multiplex PCR detection
- Multiplex PCR has good repeatability and linear range.
8. Multicolor melting curve analysis (PCR-RFQ165)
 9. Humanized software interface design

Application

Food safety testing	Veterinary and Agriculture
Speciation and pathogen testing allow users to understand the origin, type and safety of consumer products.	Extensive veterinary and agricultural pathogen testing
Mycotoxins	Poultry, pigs
Speciation	Cattle
Allergens	Sheep, goats
Pathogen contamination	Horses
Coronavirus testing for environments and surfaces	Petite such as cats and dogs
Human pathogen detection	
Respiratory infection	Infectious hepatitis
Sexually transmitted disease	Human papilloma virus
Herpes virus infection	Gastrointestinal infection

Specification

Model	AST-FQPCR164I	AST-FQPCR165	AST-FQPCR164II
Type	Real-Time QPCR		
Sample capacity	16		
Compatible consumables	0.1mL Clear tube	0.1ml Low Profile, PCR tube& 8-Strip with Real Time Cap,transparent tube	0.1mL Clear tube
Maximum ramping rate	10.0° C/s		
Temperature range	4-100 °C		
Temperature accuracy	± 0.1°C		
Temperature uniformity	±0.15°C		
Excitation light	Single LED		
Detector	PMT		
Detection method	Time-resolved real-time scanning		
Excitation/Emission wavelengths	455-650nm/510-750nm		
Fluorescence Channels (MAX)	4	5	4
Supported dyes	FAM/SYBR Green, VIC/JOE/HEX/TET, ROX/Texas Red, Cy5/LIZ (Optional- Cy5.5 or Cy3)		
Data Connection	USB, bluetooth		
Operation mode	PC		7 inch touch screen
Power	110/220V,50/60HZ		100-240V,50/60HZ
Size(W×D×H)(mm)	290×265×130		
Shipping Size(W×D×H)(mm)	410×375×185		
N.W/G.W (kg)	5.5/6.5		