TECHNICAL DATA SHEET

ALab™ Accurate 96 Real-Time PCR System

Real-Time PCR System · 96 wells · 4 or 6 fluorescent channels · 6.0 °C/s



ALab™ Accurate 96 Real-Time PCR System

The ALab™ Accurate 96. Image shown for reference.

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SECTION I

Product Overview

The ALab™ Accurate 96 is a real-time PCR system, a necessary choice for quantitative analysis of molecular biology, widely used in scientific research, clinical detection and diagnosis, quality and safety testing, and forensic applications.

It takes 0.1ml PCR tubes×96, an 8×12 PCR plate or a 96 well plate ×1, uses Peltier thermal cycle technology (max. heating/cooling rate 6.0℃/s) and MPPC detection with time-resolved signal separating technology, and is configured with 4 or 6 fluorescent channels.

SECTION II

Core Advantages

- **Channels** — 4 or 6, multiplex PCR
- **Detection** — MPPC, time-resolved
- **Block** — 96 wells, Peltier
- **ROX** — no ROX correction required
- **Edge effect** — edge temperature compensation
- **Gradient** — 30–100 ℃

SECTION III

Specifications

Technical data — Accurate 96

Specifications	
Brand	ALab™ by ACS Material
Model	Accurate 96
SKU #	ALAQ9600
Product Type	Real-time PCR system
Thermal cycle technology	Peltier
Detection device	MPPC
Detection mode	Time-resolved signal separating technology
Fluorescent channels	4/6 channels

Specifications by model — Accurate 96 4-channel · 6-channel

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

SECTION IV

Applications

Quantitative analysis of molecular biology in scientific research, clinical detection and diagnosis, quality and safety testing, and forensic applications.

Product value: up to 6 fluorescence detection channels, reduced multi-color crosstalk and edge effect without ROX correction, time-resolved signal separation, edge temperature compensation and long-lasting LED light. Select the configuration before ordering.

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