## **BioTeke Corporation**



# Fast real-time fluorescence PCR analyzer

## **highly sensitivity high specificity high stability** Detection of respiratory pathogens, intestinal pathogens, food safety

BioTeke Corporation(wuxi) Co., Ltd





BioTeke Fast real-time fluorescence PCR analyzer (BTK-8) upgrade on traditional fluorescent quantitative PCR instrument, which not only retains the advantage of high detection sensitivity, but also overcomes the disadvantage of time-consuming reaction. In this way, one-round reaction time can be shortened from 1.5 hours to 20~30min, which greatly saves time.

- Its Windows Touch-Screen Operating System edit and run programmes by itself Instead of connecting to the computer. It can directly connect to the printer to print the report.
- BTK-8 Ultrafast Real-time PCR System is available with 4-color fluorescence channels, the temperature-dependent fluorescence optical system can acquire all channels simultaneously.
- Highly sensitive to rival ABI Quantstudio 6.
- Super instrument performance,  $8 \sim 12^{\circ} C/s$  temperature change speed,  $20 \sim 30$  min to complete 40 cycles.
- DNA/RNA detection available, Integrate traditional PCR/RT-PCR functions, and supports one-step RT-PCR Method.
- Mobile portable and innovative compact design, especially suitable for on-site test and POCT.
- 10uL reaction system saves reagents and samples.

### Application field



1.Daily rapid detection and emergency detection for CDC, Customs Inspection and Quarantine .

2.Clinical medical testing. Develop various diagnostic reagents and POCT



4.Outdoor Instant Detection
Scene Application, such as immediate and rapid on-site inspection by armed forces and legal
operation department .
5.Food Safety Monitoring, such

emergency detection on this platform.



3. PCR Technology Development and Application Tools for Research Institutes.Fast and efficient PCR experiments to improve the efficiency and level of scientific research.



as African swine fever, blue ear disease, foot-and-mouth disease, Newcastle disease virus, foodborne microorganisms, aquaculture diseases, meat adulteration detection and so on.



#### Sample type:

Pharynx swab, nasal swab, anal swab, oral swab, culture, bacterial culture suspension, serum, plasma, vomit, diarrhea, animal tissue, plant tissue, etc.

### Advantage

1.4-color fluorescence channels

FAM /VIC /ROX /Cy5 included

Channel Excitation wavelength Detection wavelebght (nm) Fluorescent dye

Channel 1	470±10	510±5	FAM,SYBR® Green I,Fluorescein, EvaGreen,Alexa Fluor 488
Channel 2	530±5	557±5	JOE,VIC,HEX,TET,MAX,CAL Fluor Gold 540,Yakima Yellow
Channel 3	585±5	610±5	ROX, CAL Fluor Red 610, Cy 3.5, Texas Red, Alexa Fluor 568
Channel 4	625±5	660±10	Cy5,Quasar 670,LightCycler Red640,Alexa Fluor 633

#### 2. Multiplex Test

Adopting 8-hole chip,8 samples and multi-target gene can be detected simultaneously.

3.Simple and rapid

The ultra-fast temperature rise and fall rate of  $8 \sim 12^{\circ}$ C/s can shorten the PCR experiment from 1.5 hours to only 20~30 minutes.

4. Micro-reaction system

Only 10µL reaction system is needed, reducing reagent cost.

5.High sensitivity

Adopting microfluidic technology, each reaction pore is relatively independent and has no cross interference. As a result, the detection system has high sensitivity and can achieve the same sensitivity as ABI Q6.

6.Portable and durable

Fast real-time fluorescence PCR analyzer weighs 8kg, which is so light and compact that can be carried to site and field in suitcases. Moreover, it can also be equipped with vehicle charging or storage battery and full power of it can run 10~12 rounds of PCR programs a day.

#### ABI QuantStudio 6 Experiment data

#### BioTeke BTK-8 Experiment data

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Project	BTK-8 Parameter		
Size	340*275*265 mm	Transportation and storage temperature	$-20\sim55^\circ\!\mathrm{C}$
Weight	8KG	Sample capacity	8*10 µ L
Power supply	220V	Applicable consumables	Dedicated consumables
Communication Interface	USB	Temperature control range	$4\sim 99^{\circ}$ C
Operating environment temperature	$18\sim35^{\circ}\mathrm{C}$	Temperature control accuracy	±0.1℃
Operating environment relative humidity	30%~80%	Average heating and cooling rate	8∼12 °C/s



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