**BIOBASE**®

# Fluorescent Quantitative PCR Detection System



#### Introduction:

powerful assay design algorithms, optimized qPCR regent, intuitive data analysis software, and flexible instrumentation to help harness the power of qPCR across a rich and diverse set of applications. Explore our robust solutions for your Real- time PCR is used for sensitive, specific detection and quantification of nucleic acid targets. We have developed qPCR-based research

#### Application:

* Basic materials research	* Pathogen detection	* Public health safety surv
* Meat products adulterated * Transgenic testing	* Transgenic testing	* Food safety inspection

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\* Meat products adulterated \* Transgenic testing

\* Precise tumor treatment

\* Genotyping

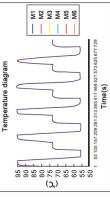
- \* Genetic screening \* Drug development and rational drug use
  - k Gene expression
  - \* Stem cell research

#### Feature:

- \* Six independent temperature control.
- \* Thermal compensation technology of temperature module. \* No edge effect of temperature and optics have.
- k Maintenance-free long life continuous spectral excitation source.
- \* Synchronous and fast acquisition of low temperature CCD 0.15s in cold state.
  - \* Relative quantitative high sensitivity 1.5 times effective discrimination.
    \* Flexible, open and user-friendly software platform.
- \* Open reagent consumable platform.

### Temperature Control Module:

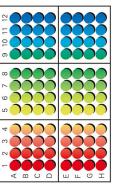
frequency system voltage, current, ensures the module heating speed, effectively prevents temperature overshoot no edge effect and the evaporation temperature, not only saves your precious time to amplify the required temperature uniformity and the repeatability of the results achieved perfection, no matter what kind of test mode, application, On the basis of the six independent temperature control technology, using the enclosed liquid heat transfer efficiency, combined with environmental scanning monitoring regulation auxiliary infrared with heating and intelligent variable it can get good data uniformity and repeatability.



**BIOBASE CHINA** 

- Platinum Sensor Peltier
- Temperature control repeatability diagram of 6 temperature zones





## Renderings of different temperature distributions of reaction plate

Optical Module:

attenuation without conduction to each reaction holes and cold CCD, from physical properties to ensure consistency On behalf of the world's leading optical transmission and collection technology, use optical fiber after the excitation light source for reaction system and the emission of light extend the application field of qPCR to the protein level and greatly improve the detection sensitivity, can make your low effective detection and distinguish easily copy and provide a new way for the construction of multiple sample. The channel mismatch function is added to from the reaction system after excitation, the energy and authenticity of the excitation and detection, systems of diagnostic reagents

Optical fiber ight source ○ Optical fiber Excitation

Channel	Excitation Wavelength (nm)	Emission Wavelength (nm)	Examples of Fluorescent Dyes
1 Blue	460~480	512~528	FAM/SYBR Green I/Eva Green.
2 Green	515~535	562~578	VIC/JOE/HEX/TET
3 Yellow	560~580	612~628	ROX/Texas Red
4 Red	610~630	662~678	Cy5
5 Red	660~680	702~718	Cv5.5/Quasar705

- Channel combination: 6-color excitation light filter and 6-color detection light filter can detect≥21 different fluorescence spectra, channels are completely open, supporting third-party reagent optimization Support FRET application.

  • Multichannel static fluorescence function: analysis of starting template and end product.

  • Filter can be customized according to customer need.