
# Real-time Fluorescent Quantitative PCR Analyzer

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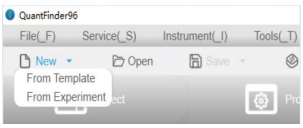
# Real-time Fluorescent Quantitative PCR Analyzer

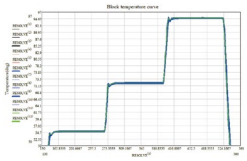
DS-RT16N/DS-RT48L

## Product features

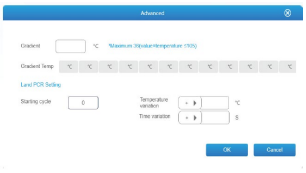
- High-quality Thermoelectric Module specially designed and customized, multi-point control, brings excellent temperature control performance, and BFQP-96 has a maximum ramp rate of 6 ℃/s
- Long-life maintenance-free LED excitation light source, high-sensitivity photomultiplier tube(PMT) and professional optical fiber ensure high-intensity and high-stability signal transmission
- Well by well scanning results in no fluorescence edge effect, and the instruments do not need ROX calibration. BFQP-96 single-channel scanning time is less than 1.5s.
- The analysis software is friendly, intuitive, concise, humanized and easy-to-operate. New experiments can be quickly created in multiple ways, and the results are automatically analyzed after the experiment.
- The report template can be customized, and supports data export in multiple formats to facilitate access to the LIMS system.
- Electric automatic hot lid,no manual operation is required.



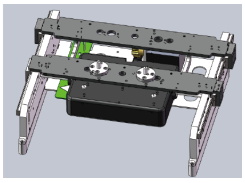

Multiple new experiment creation ways



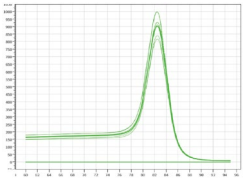
Excellent temperature control performance



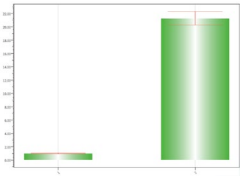
Multiple advanced functions



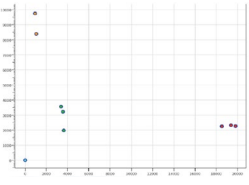
Electric automatic hot lid



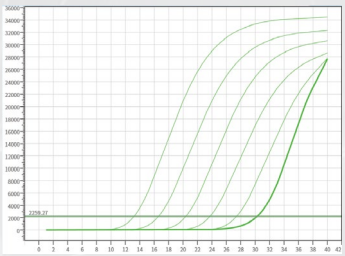
Melting curve



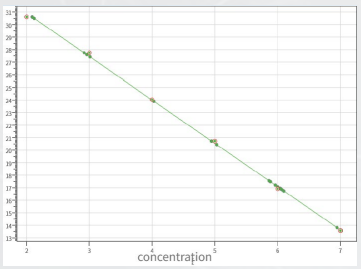
Relative quantification



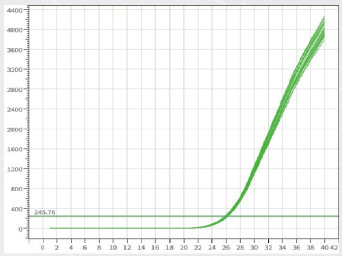
SNP



**Gradient curve**



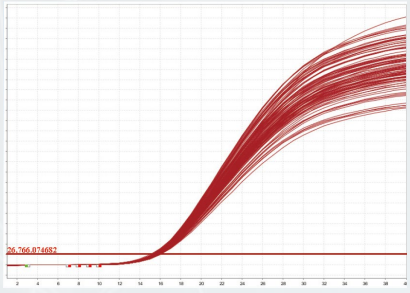

**Standard curve**
**Related coefficient: -0.999**



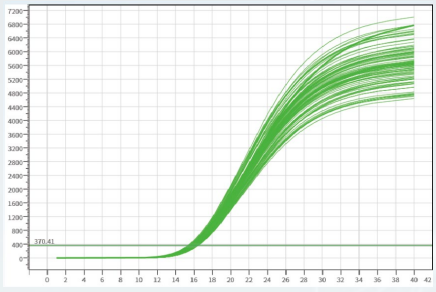
**Uniformity**

## Experimental comparison

Prepare 5 μL reaction system to amplify on BigFish BFQP-96 and an international famous brand Qpcr instrument respectively, and compare the amplification effect and reagent evaporation



Amplification curve of a famous brand qPCR instrument



Amplification curve of qPCR instrument

5 μL reaction system of a famous brand qPCR instrument

5 μL reaction system of BigFish qPCR instrument

## Application scenario

| Model | DS-RT16N | DS-RT48L |
|---|---|---|
| Sample quantity | 16well x 0.2ml | 48well x 0.2ml |
| Consumable type | 0.2 mL 8-strip tubes, Single tube (the bottom should be transparent) | |
| Reaction volume | 10-100 μL | |
| Dynamic range | 1-10 copies | |
| Sample repeatability | CV < 1% | |
| Sample linear | \|r\| ≥0.999 | |
| Hot lid | Manual hot lid | The hot lid can be controllers by touch button to automatically press the tube |
| Fluorescence channel | 5 | |
| Fluorescence dyes | F1: FAM,SYBER Green I ;SYTO 9 Evagreen ,LG Green<br>F2: VIC HEX TET,JOE TAMRA ,CT3 NED:<br>F3: ROX/Tex Red; F4:CY5; F5:CY5.5; | |
| Excitation light source | High brightness and long life LED excitation light source | |
| Detector | PD | |
| Excitation wavelength | Channel 1:470nm; Channel 2: 523nm; Channel 3: 571nm; Channel 4: 628nm; Channel 5: 678nm | |
| Detection wavelength | Channel 1: 525nm; Channel 2: 564nm; Channel 3: 612nm; Channel 4: 692nm; Channel 5: 718nm | |
| Single channel scan time | < 1s | 3.75s |
| ROX calibration | No need | |
| Temp. control method | Thermoelectronic | |
| Ramp rate (max) | 6°C/s | 4°C/s |
| Temp. accuracy | ±0.1°C | |
| Temp. uniformity | ≤±0.2°C (55°C) | |
| Temp. range of hot lid | RT + 5°C - 110°C | |
| Temp. gradient range | / | 0.1-6°C<br>(Independent temp. control) |
| Time increase/decrease | 0.1~9min59s, Long PCR is available | |
| Temp. increase/decrease | 0.1~9.9°C, Touchdown PCR is available | |
| Software function | Support absolute quantitative, relative quantitative, melting curve, HRM, SNP and other functions | |
| Safety protection and alarm | Over heat protection and alarm for block and hot lid | |
| Result export data | Excel, TXT | |
| Software language | English | |
| Voltage range | 100-240V, AC 50/60Hz | |
| Screen | 7 inch touch screen | 6.8 inch display screen |
| Interface mode | USB | USB-type B |
| Power (max) | 350W | 600W |
| Dimensions (D x W x H) | 280 x 187x193 | 410 x 300 x 286 mm |
| Net weight | 6.9kg | 13kg |