

## Fully Automated Digital PCR System

## **SCI Digital PRO**



#### ✓ 4 in 1, Fully Automated

Sample loading, droplet generation, PCR amplification, and signal reading Complete automation and integration eliminate manual errors

#### ☑ Ultra-Multiplex quantification

(6+1) fluorescence channels compatible with Exponential Ultra-Multiplex Digital PCR function

#### ☑ High droplet stability

Innovative physical oil-water isolation technology prevents droplet breakdown and fusion. Effective droplet ratio > 95%

#### ✓ High compatibility with market PCR Mix

Microfluidic chip technology compatible with market PCR mix Facilitates rapid system matching and efficient kit development

#### Dual independent thermal modules

24 samples, 2 PCR thermal modules Simultaneous running of different programs

#### ✓ Models with fluorescent channel number

Choose from models with 4/5/6/(6+1) fluorescence channels





#### **Product Specification**

| Throughput               | 24 Samples  |
|--------------------------|---|
| Sample volume            | 25~30µL   |
| Droplet number           | > 20,000  |
| Fluorescence<br>channels | Atto425, FAM(Evagreen), HEX(VIC),<br>ROX, Cy5, Q705, Customizable Channel |
| Chip scanning time       | Single channel: < 0.5 min/sample  |
| Optical sensor           | CMOS  |
| Light source             | LED   |
| Size                     | W 440mm, D 628mm, H 497mm   |
| OS interface             | English, Chinese  |

#### **Technical Specification**

| Sensitivity             | 0.01% |
|-------------------------|-------|
| Dynamic range           | 5logs |
| Effective droplet ratio | ≥95%  |
| Droplet uniformity      | >99%  |
| Droplet uniformity      | ± 10% |

#### **Droplet Generating Chip**

| Chip 20K-B      | 20,000 droplets |
|-----------------|-----------------|
| Customized chip | 80,000 droplets |

#### **Digital PCR Universal Kits**

| Composite   | Components                                 |
|-------------|--|
| Reagents    | PCR Mix (enzymes, buffer), oil phase A & B |
| Comsumables | Chips, 8-tube strips & caps, pipette tips  |



#### Fully Automated & Integrated Digital PCR Device



Digital PCR Chip





### Extremely Easy Workflow

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**4 in 1, Fully Automated** Sample loading, droplet generation, PCR Amplification, and signal reading



Data Analysis Raw droplet image, data tracking, automatic report generation



**dPCR** Master Mix

24-well plates

8-tube strips, single tube



#### Liquid Biopsy

- Rare mutation detection
  Copy number variations
- Methylation screening
- MRD
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#### **Infectious Diseases**

- Multiplex respiratory test
- Multiplex V. vulnificus test
- Multiplex sepsis testPathogen genotyping
- Patnogen genotyping



**Reference Materials** 

Sequencing library quantification

Nucleic acid reference material quantification

Enterprise reference material quantification

Nucleic acid QC material quantification

#### **Reproductive Genetics**

- Trisomy 21 detection
- SMA detection
- RhD- blood type detection
- Deafness gene detection



Environment

Water microorganisms

Livestock pathogens

Geothermal archaea

#### **Biopharmaceuticals**

- AAV titer quantification
- QC for stem cells, Car-T cells, NK cells, etc.
- $\cdot$  Gene editing quantification and QC
- Host cell residual DNA detectionRNA vaccine gene variation quantification





#### Agriculture

- Molecular breeding
  Crop pathogen control
  Aquaculture pathogen
- Aquaculture pathogen
   Animal disease prevention

#### **Food Safety/Inspection**

- Transgenic crops/foods
- Imported & exported food pathogens
- Animal-derived food detection
- Residual microorganism tracing









# Leading life science and molecular diagnostics into digital era



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