

AccuMini Plus dPCR



Chip-based Digital PCR

100%

Chip utilization rate is 100%, independently

2 H

Test is completed within 2 hours

2 COLOR

2 fluorescence channels, Probe/Dye

4 TYPES

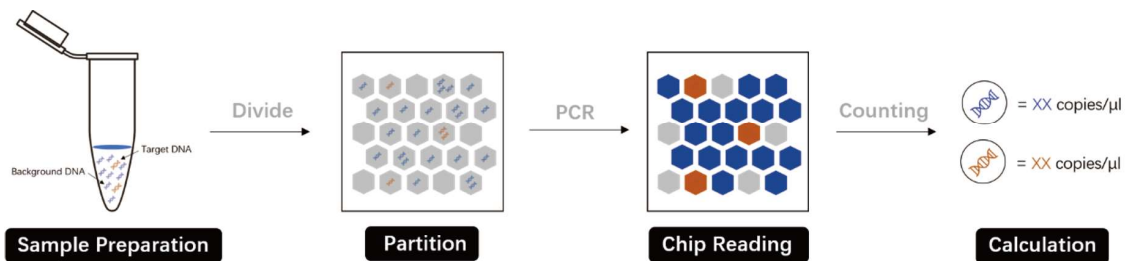
4 types of chips (15K/20K/28K/50K)



AccuMini Plus Digital PCR System

Digital PCR Principle

The strategy of digital PCR - "divide and rule". A standard PCR reaction is allocated to a large number of micro reactors, and each reactor contains or does not contain one or more copies of the target molecule (DNA template) to achieve "single molecule template PCR amplification". After amplification, the number of positive wells is "counted" by the number of positive reactors, and then the number of positive copies is calculated according to Poisson's formula.



Technical Advantages



Direct

Interpretation by endpoint method, no standard curve required



Sensitive

Single copy detection, suitable for low concentration samples



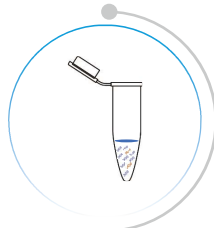
Stable

Not susceptible to inhibitory factors & amplification efficiency

Workflow

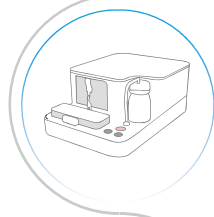
1. System Preparation

Mix nucleic acid template, digital PCR Master Mix, primers, probes and other PCR components in proportion.



2. Micro-unit Generation

The sample preparation instrument completes the generation of tens of thousands of micro-units



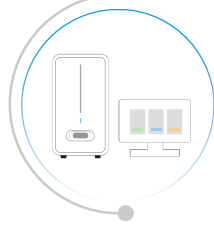
3. PCR

Complete gene amplification on the gene chip amplification instrument.



4. Chip Reader & Analysis

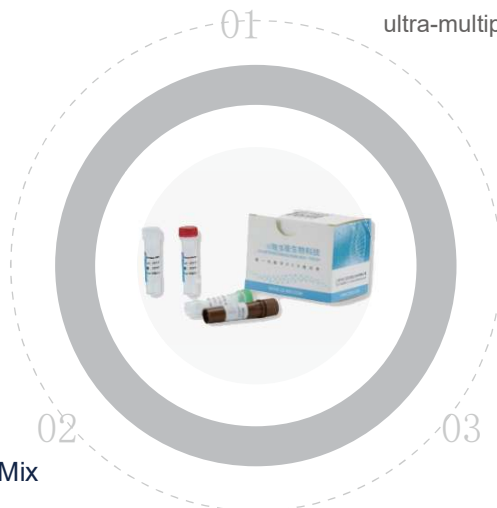
Chip photography and imaging, software analysis and calculation of target concentration.



Whole process < 2.5h

Digital PCR Master Mix

- DigitalAmp PCR Master Mix (10X)
Suitable for probe method, suitable for high sensitivity ultra-multiplex dPCR amplification reaction.



- DigitalAmp PCR Master Mix (SYBR Green)

Suitable for dye method, efficient and stable.

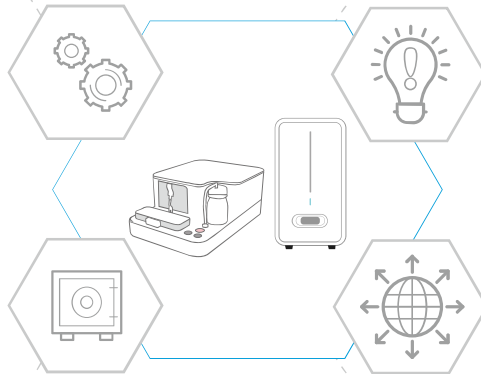
- One-step RT-dPCR Mix (5X)

A one-step reaction system was applied, and RNA was directly amplified

Product Features

FAST

Single-chip reading can be completed in 5 seconds, and the number of detection samples in a single day can reach 480



Flexible

There is no need to wait for enough samples, each part of the instrument can be expanded, upgraded, and used independently

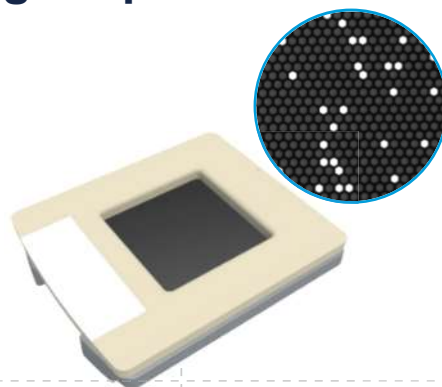
Compact

The machine is designed with the footprint of only the size of a palm, saving valuable experimental space.

Open

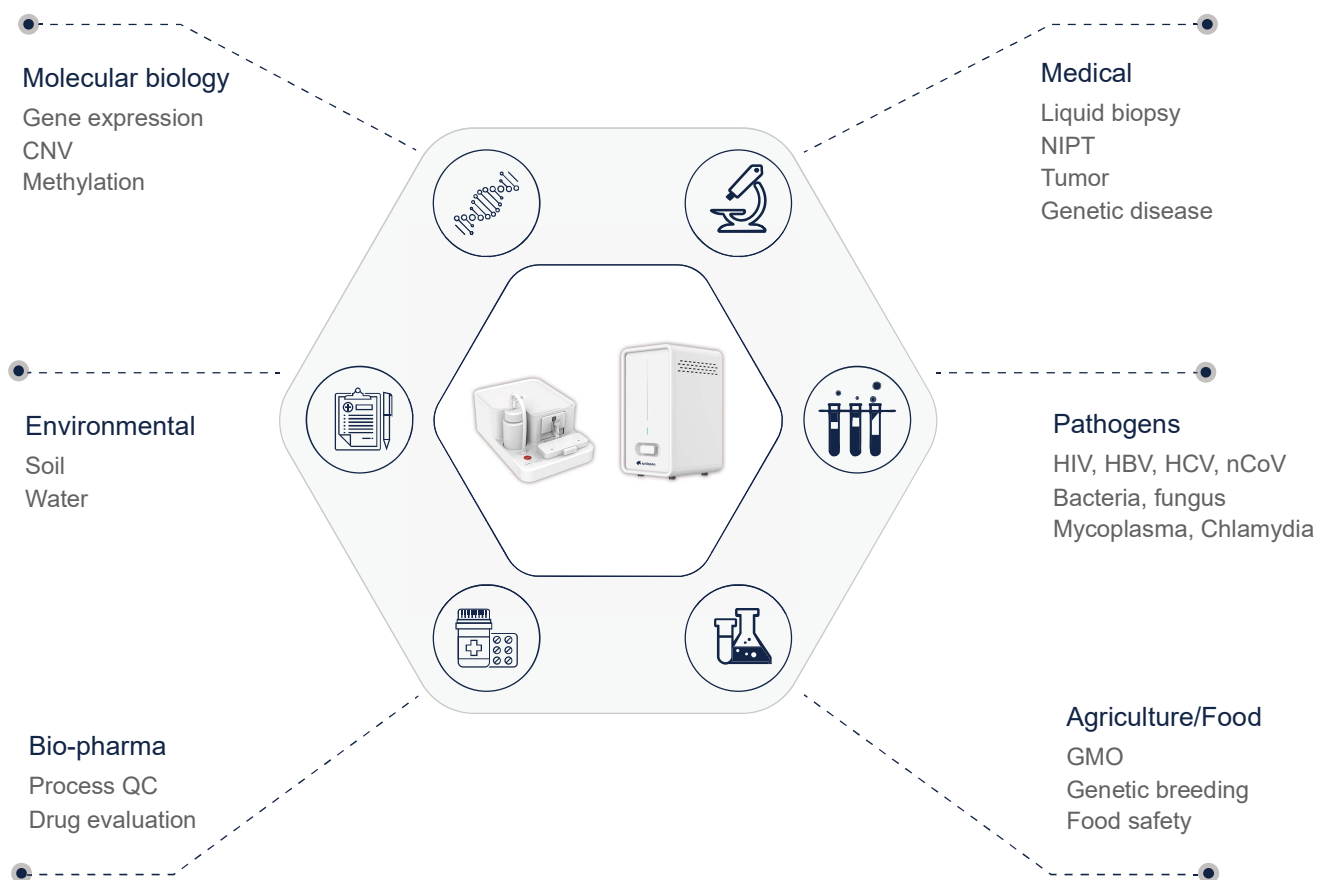
Compatible with a variety of mainstream brand reagents. (Thermo/Roche/Qiagen/Takara/Transgene/Yeasen, etc.)

MEMS Processing Chip



- MEMS processing, etching accuracy of the lithography machine can reach the nm level, and the micro-cavity is uniform
- Chips are fully enclosed to eliminate cross-contamination
- The chip can be read repeatedly, and the reaction unit can be observed independently, which is conducive to analysis and traceability, and the system is highly open

Application



Specifications

Model	AccuMini Plus
Chip	Single-Chip (15K/20K/28K/50K)
Reaction volume	20µl
Sample effective utilization rate	>95%
Sample preparation throughput	1pc
Amplification throughput	12pcs/15pcs
Detection throughput	12pcs/15pcs
Detection time	1min/pc
Detection channel	FAM,HEX/VIC
Sample preparation machine size (WxDxH)	230x335x132mm
Biochip reader machine size (WxDxH)	130x205x243mm

Order Information

Digital PCR Instrument

Name	Note	Order No.	Format
Sample preparation	Micro-unit formation	UINLD100A	1PC
Gene amplifier	Micro-unit amplification	UINAP100B	1PC
Biochip reader	Chip reading and analyzing	UINRD200M	1PC
Digital PCR system	Sampler+amplifier+reader	UAMINI200B	1SET

Digital PCR Reagent & Consumable

Name	Note	Order No.	Format
dPCR(mini) Master Mix (2x)	Applied to probe method	ULSCK200B	100T
dPCR(mini) Master Mix (10x)	Applied to probe method	ULSCK200C	100T
RT-dPCR(mini) Master Mix (5x)	Applied to probe method	ULSCKRT02	100T
dPCR Master Mix (2xSyb)	Applied to dye method	ULSCK100C	100T
dPCR Master Mix (10xSyb)	Applied to dye method	ULSCK100B	100T
Seal oil	Chip oil seal	UCISO100A	50ML
dPCR Biochip Box	biochip+chip cap+blade	UCICK100A	12T/BOX



Shanghai Unicorn Medical Technology Co., Ltd.

Room J, Building 4, B Zone, No. 925 Yecheng Road, Jiading Industrial Area, Shanghai

Tel: +86 (021) 6082 8473 Cel: +86 173 1710 8636 Email: info@unicornlifescience.com

www.unicornlifescience.com

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