## Bioer Technology Introduction









### **Company Profile**



#### **Company Profile**



Hangzhou Bioer Technology Co., LTD is a molecular detection supplier based on a series of products and services. It is located in Hi-tech (Binjiang) District, Hangzhou, covers an area of 22212 square meters, has more than 600 employees. Bioer Technology obtained the 1st registration certificate of China quantitative fluorescent PCR detection system, we have developed into a world-famous PCR industrial base, providing customers with a full set of solutions in the field of life science research and application, including instruments, reagents, consumables, etc.

#### **Company Honor**













- Bioer has established provincial high-tech research and development center,
   Zhejiang University Bioer Science and Technology Joint Research Center
   and other research institutions. The company has established a perfect
   management system, passed the ISO9001 and ISO13485 certification.
- Bioer Technology has more than 40 registration certificates of various medical devices and 70 patents in total.

#### **Research Team**

Bioer has built an international research and development team, and has established cooperative relations with many research institutions in Germany, Japan and other countries.



#### **Overseas Sales Network**



- Sales in China cover **34** provincial-level administrative regions
- The global sales network covers more than 100 countries and regions

Channel + Direct sales system,
Reagent + Instrument sales team



#### **Product Introduction**



#### **Bioer Family**

















Fluorescence quantitative PCR detector





**PCR** kit











**Nucleic Acid Extraction Kit** 

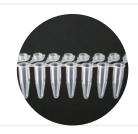


**Nucleic acid extraction and** purification instrument











**Thermal** Cycler

Cooling&He ating Block

**Fast** detection box

**PCR** laboratory

**Consumables** 

#### Fluorescence quantitative PCR instrument

version of the fluorescent

quantitative PCR instrument





instrument

**Automatic PCR analysis system** 

#### Fluorescence Quantitative PCR Detection System series



LineGene 9600 Plus (FQD-96A)

- bottom detection, compatible to reaction volume down to 5ul
- Multiple options: 6 channels fluorescence detection, no crosstalk between different channels
- Equipped with whole block scanning and formulated line scanning mode, 96-well scanning takes only 5.5s
- Precise temperature control



- bottom detection technology
- Multiple options: 4-channel design
- Block: 48 wells, 3 blocks independent temperature control.
- Flexible program setting, comprehensive analysis and report functions
- Portable tablet compatibility with wireless use makes operation easier



#### **LineGene MiNiS (FQD-16B)**

- Multiple options: 2 channels & 4 channels,
   side-bottom detection
- Appearance: portable and delicate,
   convenient handling and setting.
- Rapid detection with nucleic acid release buffer

#### **QuantGene 9600 Features**



#### **Optimized temperature control system**

- Advanced thermo-electric refrigeration technology
- 6 partition thermal cycling module
- Stable and accurate gradient functions of 1 ~
   36°C ensure optimized PCR conditions



#### **User-friendly operation software**

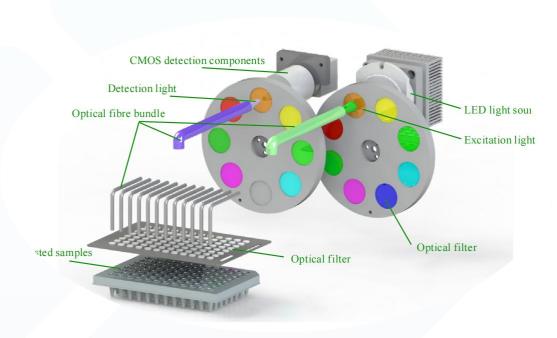
- Large screen (10.1 ') touch type software operation, greatly improve customer experience
- International standard UI design to meet user operation habits
- Flexible program setting, include analysis and reporting functions, all parameters can be stored

#### **Automatic pop-up sample bin**

 Automatic pop-up sample warehouse design, easy to operate

#### **QuantGene 9600 Top Imaging Photoelectric Detection**





#### High efficiency and fast detection

Top imaging technology (96 wells fluorescence signals simultaneously)

No detection time difference between the Wells

#### **Dynamic monitoring**

Real-time dynamic monitoring of the whole process of PCR amplification was carried out

#### **Fiber conduction technology**

Advanced fiber conduction technology makes photoelectric detection system more sensitive and reliable

#### No need of maintenance

Long life LED excitation light source requries no maintenance

#### **QuantGene 9600 New Concept**



#### Fast & Stable

The fastest

detection time is 35

minutes (with fast

mode and rapid

reagent)

New, user-friendly operation interface, smooth operation

6 partition
temperature control
gradient functions of
1 ~ 36°C ensure
optimized PCR
conditions

Multi-color fluorescence detection in a single reaction obtains more information

Multiple or single sample reports can be printed

#### **European Market Qualification Certification**









## **Upcoming: CE-IVDR Certification** 2022/06

#### **CE-IVD Certification**

- FQD-96C EMC Certification
- FQD-96C LVD Certification

#### **QuantGene 9600 Market Situation**



#### Sales status in Europe

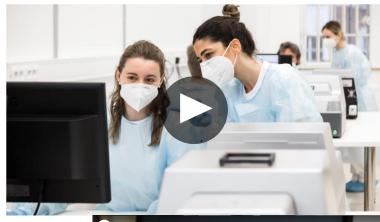
France / Portugal (Exclusive Agency) / Spain Germany (Exclusive Agency) Austria (Exclusive Agency) The United Kingdom (Exclusive Agency)

#### **Target Markets**

- IVD/ Third party testing laboratory (Ausria)
- Hospital
- Scientific research colleges and universities (France & Spanish)
- Reagent company (Germany)

#### **Top customers use Bioer products**

The **Lifebrain Group** stands for a healthy and safe future, which is made accessible to everyone with the **PCR-COVID-19 laboratory in Austria**. As one of the fastest growing laboratory groups in Europe, the Lifebrain Group sets standards in diagnostics and patient care.





#### **Product Introduction**



**Bioer technology** developed Automatic PCR analysis system, realized "Samples In, Results Out "of the whole experiment process, can help you meet the growing needs of your lab with highly efficient workflows.



Large amount of samples



Shortage of hand



High risk of infection



Improve experimental environment



Sample pre-treatment & Nucleic acid extraction

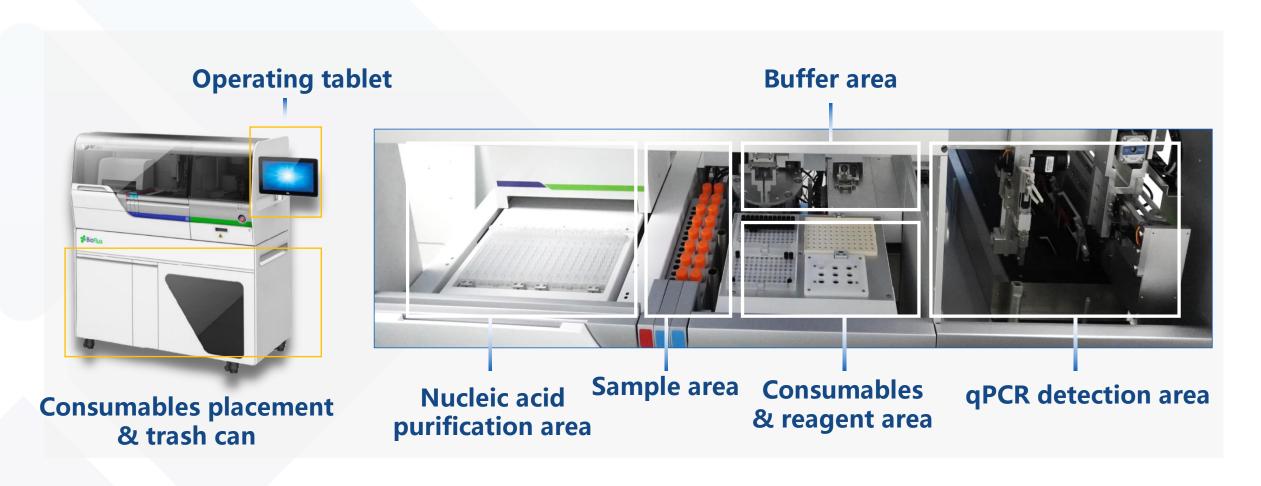
PCR system build up

PCR amplification and analysis

#### **Structure of the product**



FQD-A1600, Automatic PCR analysis system, size: 140×69×162cm, weight: 260kg.



#### **Product Features**

**Full Automation**: FQD-A1600 helps users complete the whole process from sample tube lid opening, nucleic acid purification to PCR analysis, without manual operation and realized "sample in, result out".



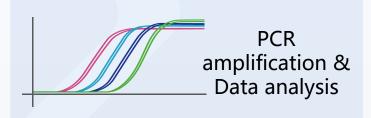
Scan and input sample information



Sample tube open/close lid



Add samples







Nucleic acid extraction and purification





PCR tube centrifugation and detection





PCR system build up and add nucleic acid samples

#### **Nucleic Acid Purifier**





First automatic nucleic acid purification instrument by magnetic bead method

Launched a new touch screen automatic nucleic acid purification instrument

Max system nucleic acid purification instrument

96 plate automatic nucleic acid purification instrument

96 plate automatic nucleic acid purification instrument with sample prepared (coming soon)

#### **GenePure Pro Nucleic Acid Purification System**

#### **GenePure Pro features**

#### **New User Interface Design**

- Ingenious and simple style
- Experiment Status Display
- User-friendly Operation

#### **Built-in Touch Screen Control**

- Capacitive Screen more smooth operation
- Stand-alone system

#### Versatility

Upgradable from 32 samples per run to
 48 samples per run



#### **Amplitude Dynamically Adjustable**

- Higher Elution Efficiency
- Higher Yield Rate

#### **New Holomagnetic Rod**

- Higher Magnetic Force, No Residue Observed
- Compatible with different sizes of Magnetic
   Beads

#### **New Heating Block Design**

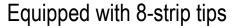
- Fully Encapsulating Block Design
- Higher Efficiency of Lysis and Elution

#### **GenePure Pro Nucleic Acid Purification System**

#### **GenePure Pro**

32T Magabio Pre-loaded kits



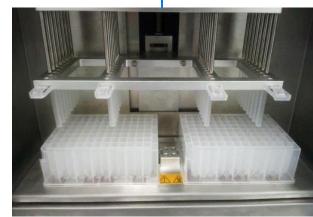




New Heating Block Design



New UI Design



One step to finish nucleic acid extraction

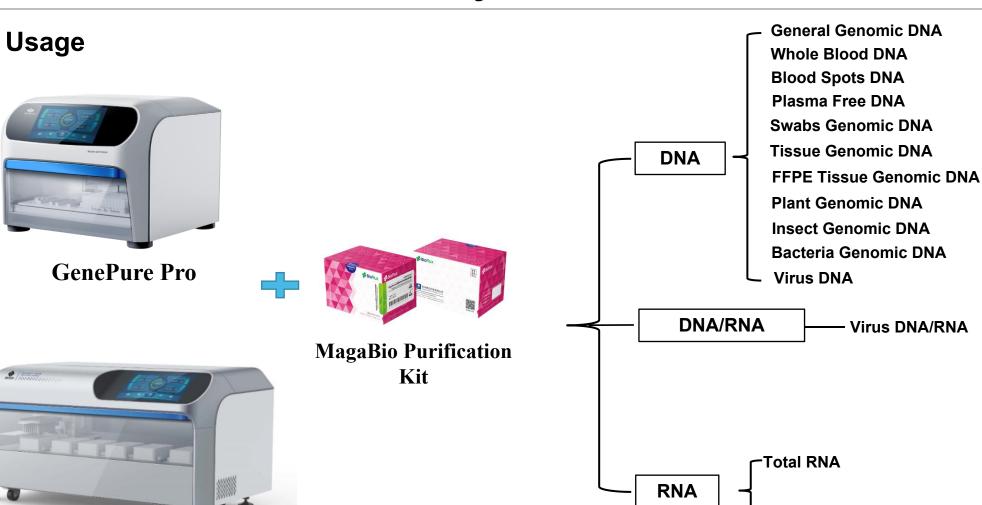




**CFDA/CE Certificate** 

#### **Nucleic Acid Purification System**





-Virus RNA

GenePure Pro 96



Care for life with science and technology

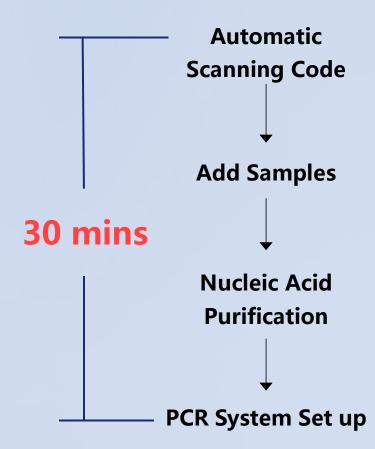
#### Fast Efficient

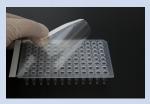
Accurate Reliable

Safe Pollution-free

Easy to operate

Complete solution





**96** Sample throughput, meet the requirements of large sample size



Minimum **6** tests reagent, Fast and efficient



**4** channels pipette guns working simultaneously, greatly shorten the sampling time

#### Fast Efficient

Accurate Reliable

Safe Pollution-free

Easy to operate

Complete solution

## High throughput workflow, 192 samples/h, meet the large sample detection requirements









#### 1 NPAS-9600

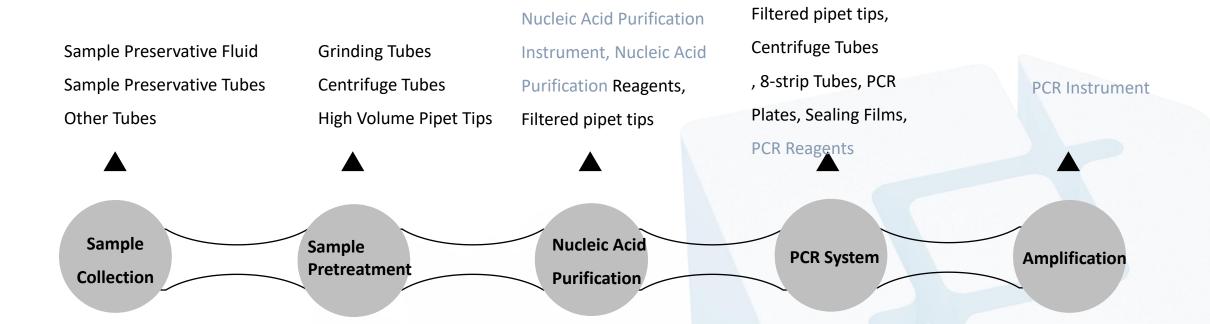
Nucleic acid processing and system build up of 96 samples can be completed every 30min

#### 2 QuantGene9600

With rapid PCR reagent, 96 samples could be detected every 30min



#### Consumables Solutions-Diagnostic



Medical centers, disease control centers, third-party molecular laboratories, animal husbandry molecular laboratories

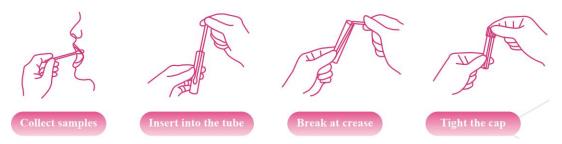
#### **Sample Preservative Fluid (BSC82)**



#### Characteristics

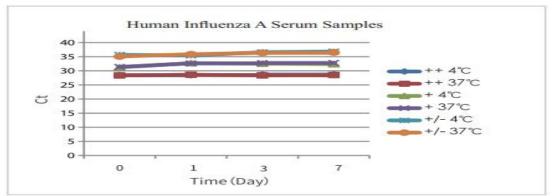
- Safety: Rapidly inactivate virus sample and cut off the source of infection to ensure the safety of frontline medical workers.
- Convenience: Different packaging specifications available, suitable for different application scenarios. The swab is convenient to operate, after the medical staff has collected the sample, put the swab directly into the sample preservation tube.
- Stability: Inhibit DNase / RNase activity, stable for transportation and storage at room temperature, effective detection rate.

#### Operation



#### (i) Application Case

Tested samples were swabs from upper respiratory tract with different concentrations of influenza A virus stored in the Sample Preservative Fluid. The experiment was carried out to test stability of storage for 7 days at 4 °C and 37 °C. After extracting RNA by using BIOER MagaBio Virus DNA / RNA Purification Kit II (Cat. # BSC71) and detecting by Real time RT-PCR, the comparison results of average Ct values are as follows:



Sample	Storage Temp	Day 0	Day 1	Day 3	Day 7
++	4°C	28.43	28.51	28.67	28.74
	37°C	28.39	28.61	28.41	28.54
+	4°C	31.22	32.73	32.56	32.39
	37°C	31.38	32.65	32.78	32.81
+/-	4°C	35.67	35.45	36.59	36.84
	37°C	35.09	35.87	36.37	36.53



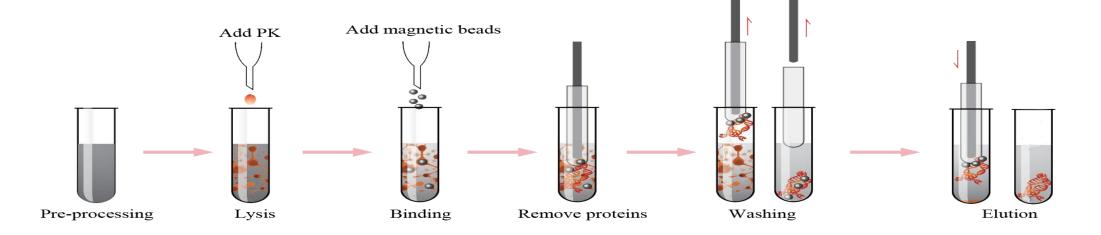


# Bioer Technology-the molecular detection supplier based on a series of products and services

Bioer Technology has always insisted on fulfilling its social responsibilities in development, giving full play to its corporate expertise and giving back to the society

#### Magabio series





STAR

MagaBio plus Virus DNARNA Purification Kit II

Cas#: BSC71S1E



- High yield and good purity.
- Automatic extraction: fast and uniform, high-throughput.
- New technology: high sensitivity can be achieved without the use of carrier RNA and other sedimentation component.
- Stable reagent: can be transported and stored at room temperature for 12 months



# Bioer Technology-the molecular detection supplier based on a series of products and services

Bioer Technology has always insisted on fulfilling its social responsibilities in development, giving full play to its corporate expertise and giving back to the society

#### **SARS-CoV-2 Nucleic Acid Rapid Detection Kit**



#### SARS-CoV-2 Nucleic Acid Rapid Detection Kit (Fluorescence RT-PCR)

Cat. # BSJ21M1

This kit is matched with QuantGene 9600 real-time quantitative fluorescence PCR instrument of Bioer Technology, and has the characteristics of rapid detection, good specificity and high sensitivity.

The conserved region of SARS-CoV-2 genome (ORF1Ab and N genes) was selected to design 2 specific primers and probes. Different fluorescent groups were labeled on the probe to produce different fluorescence in the reaction system, so as to realize rapid detection.

#### **Features:**

✓ Fast and accurate: this kit only takes 35min for one reaction, and one step to complete RT-PCR, closed tube amplification and detection to prevent aerosol pollution



#### **Application field**



#### **Clinical diagnosis**

Infectious disease detection

Genetic disease testing Tumor gene detection

#### Food safety •

Identification of adulteration of meat provenance in food Detection of foodborne pathogens Detection of genetically modified in food

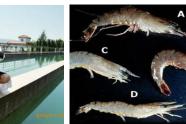
#### Animal disease prevention test-

African swine fever detection Bovine and sheep virus detection









## Environmentalmicrobiologicaldetection

#### Disease control and

prevention

Virus detection

#### Scientific Research in

#### **Universities**

Disease mechanism research Medicine development

### Public security system, Forensic

Individual identification Kinship test

#### **Entry-Exit Inspection**

#### and Quarantine

Tuberculosis exclusion Flora identification

#### **Aquaculture**

Fish and shrimp virus detection







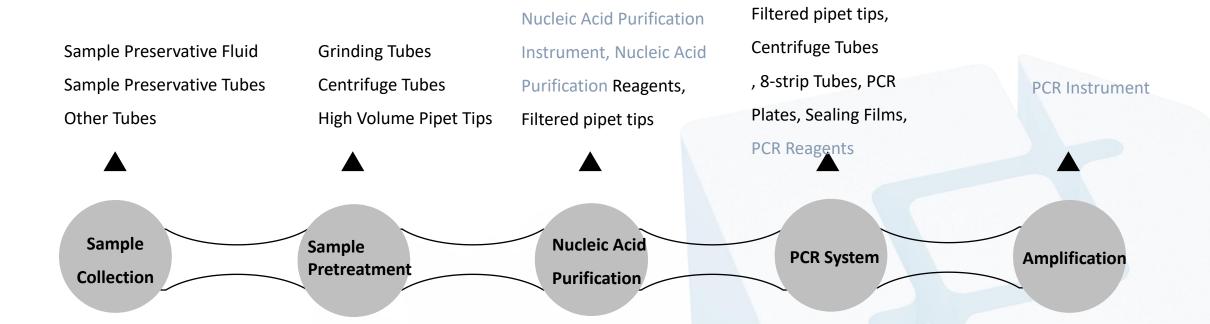
#### **Consumable Products**

Pipet tips, 0.2ml semi-skirted 96 well PCR plate, 0.2ml 8-strip PCR tubes, 96 deep well plates, shallow well plates, cryotubes, and centrifuge tubes

## 02



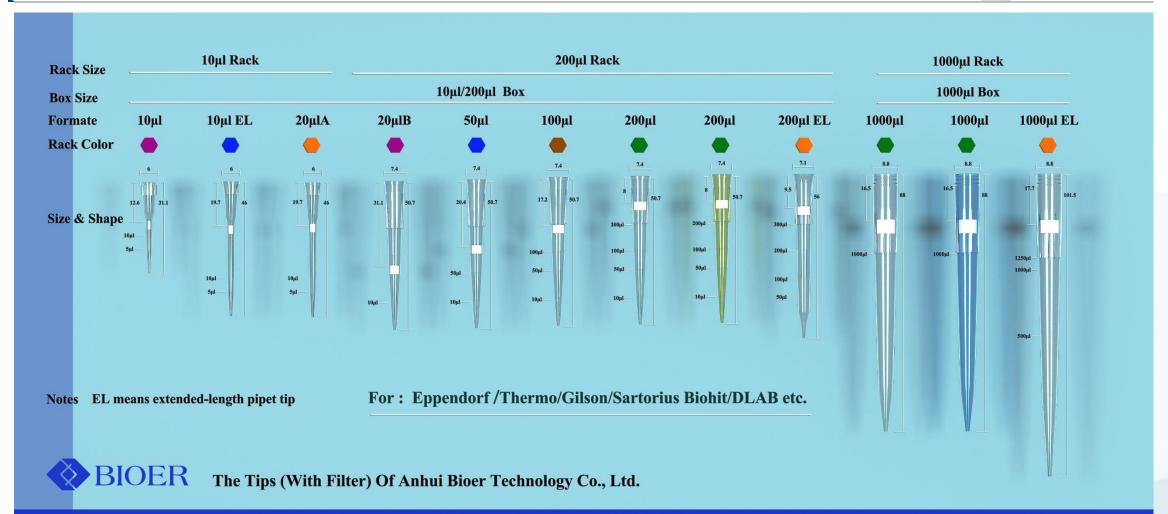
#### Consumables Solutions-Diagnostic



Medical centers, disease control centers, third-party molecular laboratories, animal husbandry molecular laboratories

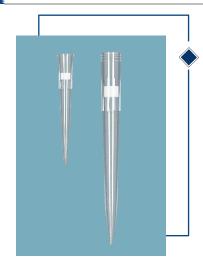
#### **Pipet Tips**





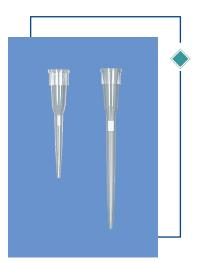
#### **Pipet Tips**





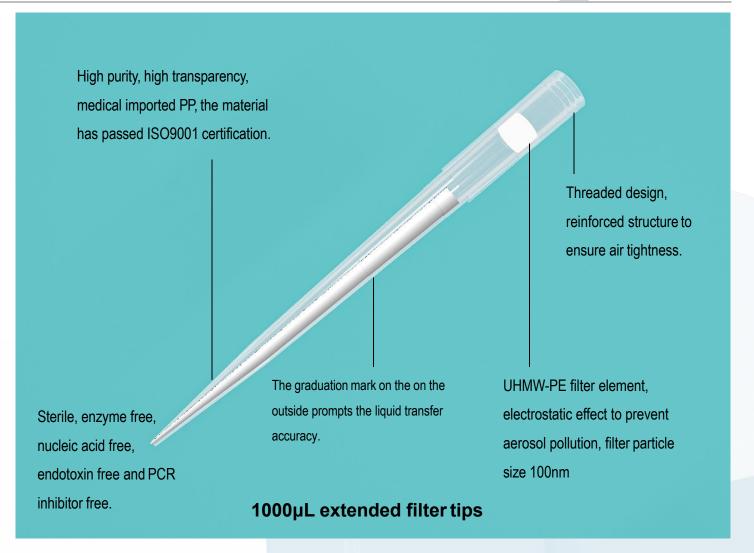
#### Golden Section Design

Hand feel is a very important aspect of consumables. Affect the operation experience and speed. Bioer pipet tips are designed with ergonomic golden section.



#### Extended Assistance in Specific Scenes

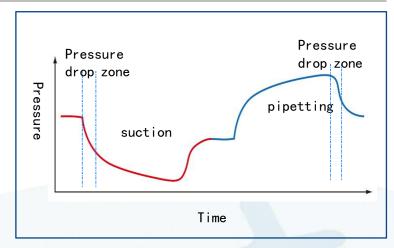
For high height containers such as deep well plates and 2ml cryotubes, the design of extended tips can better avoid cross contamination of samples.

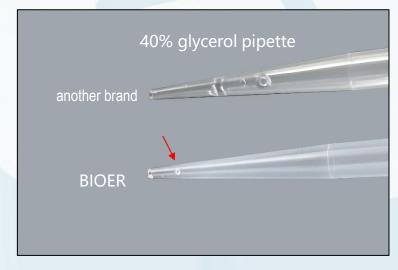


#### **Pipet Tips**









#### **Automation Tips**





#### **Automation Tips**





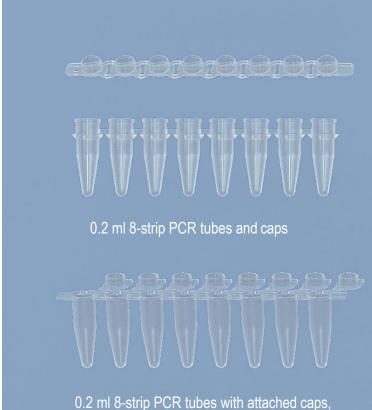




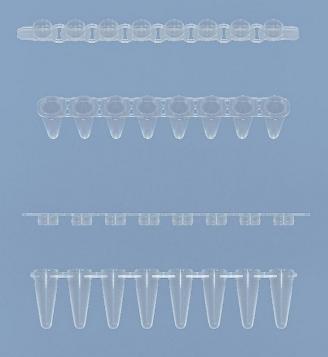
Precise attachment of tips on ZEUS (Hamilton)

#### 8-strip PCR tubes and caps









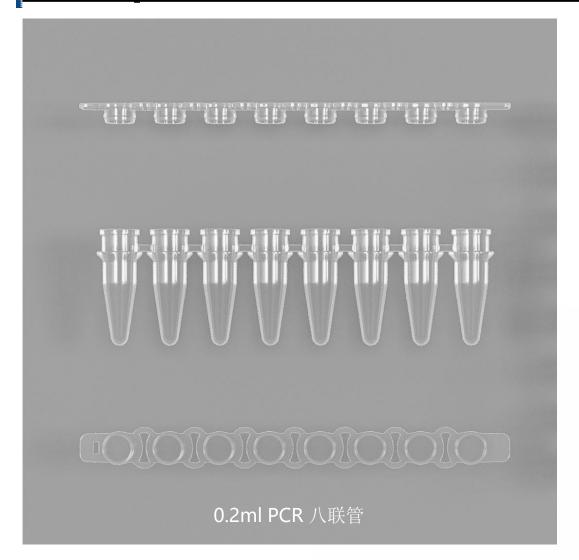




0.1ml 8-strip PCR tubes (white), compatible with ABI, Roche and Agilent systems

#### 8-strip PCR tubes







#### **Features**

The seamless and perfect combination of cap and tube, and the unique palindrome design are more conducive to reducing evaporation, especially suitable for qPCR and high-precision ordinary PCR. The tube body is equipped with a digital number indicator to reduce the risk of cross contamination by mishandling.



#### Material

High purity, high transparency, medical grade imported PP material, quality assurance with ISO9001 standard, highly resistant to chemical solvents.



#### Cleanness

RNase-/DNase-free, nucleic acid free, human genome free, endotoxinfree, PCR-inhibitor free

Mold release agents and bacteriostatic agents are not added in the production process.

#### 96 well PCR plates





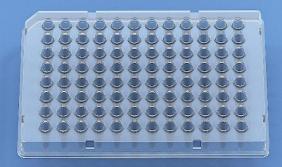
0.1ml 96 well PCR semi-skirted plate (white) for ABI PCR/qPCR



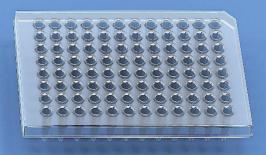
0.1ml 96 well PCR semi-skirted plate (white) for Roche 0.1ml block, qPCR



0.1ml 96 well PCR semi-skirted plate (transparent) for ABI PCR/qPCR



0.1ml 96 well PCR semi-skirted plate (transparent) For Roche 0.1ml block qPCR



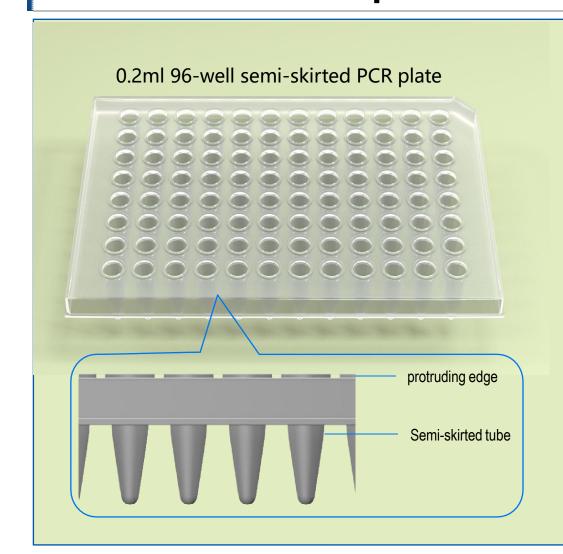
0.2ml 96 well PCR semi-skirted plate (transparent), for Bioer ABI, Bio-Rad etc.

Calalalalalalala

0.1ml 8-strip PCR cap,compatible with 0.2ml and0.1ml PCR tubes and plates

#### 0.2ml 96-well PCR plate







#### **Feature**

Comply with SBS/ANSI\_ SLAS standard design, protruding edge design to ensure air tightness when sealing film, compatible with pressure film and heat sealing film, transparent design at the bottom. The numbering design of the lower surface will not interfere with the marking while providing numbering. Customizable with numbering printed by code spraying.

#### Material

High purity, high transparency, according to medical grade imported PP, the surface of the panel is polished, the bottom is frosted, and the reaction well is transparent.

#### Cleanness

RNase-/DNase-free, nucleic acid free, human genome free, endotoxin-free, PCR-inhibitor free

Mold release agents and bacteriostatic agents are not added in the production process.

#### Cryotubes





#### Centrifuge tubes





It can be easily opened and closed with one hand, with accurate scale design. The frosted design of the side and tube cover is convenient for users to mark

It can withstand 14000g centrifugal force, and the widening design of the cap



High purity, high transparency, medical grade material, resistant to chemical solvents. Excellent sealing properties such as permeability, centrifugation, heat and cold, low binding, and sterilized.



# Bioer Technology-the molecular detection supplier based on a series of products and services

Bioer Technology has always insisted on fulfilling its social responsibilities in development, giving full play to its corporate expertise and giving back to the society



## Thank You



Москва, 129327, ул. Ленская, д. 2/21, помещение III, комната №2, этаж 5, Тел.: 8 800 777 8579, E-mail: biomol@rmedtorg.ru, www.rmedtorg.ru

