best AnimalCARE

PCR SOLUTION

Product Introduction

Operating Instructions

FAQ

More to come...

Part.1

Product Introduction

1

- PCR Solution for pet
- Accurate
- Fast
- Quality

PCR Solution for pet

PCR

· 16 wells x 4 channels = 64 gene targets

· Class III (highest level) medical instrument registration for Chinese NMPA, CE IVDR registration

HyperLyse Auto Extractor

· Processing 1-4 samples with flexibility

· UV light decontamination

Report Printing System

· One-click upload, direct printing

· Data management system with unlimited storage

PCR Kits

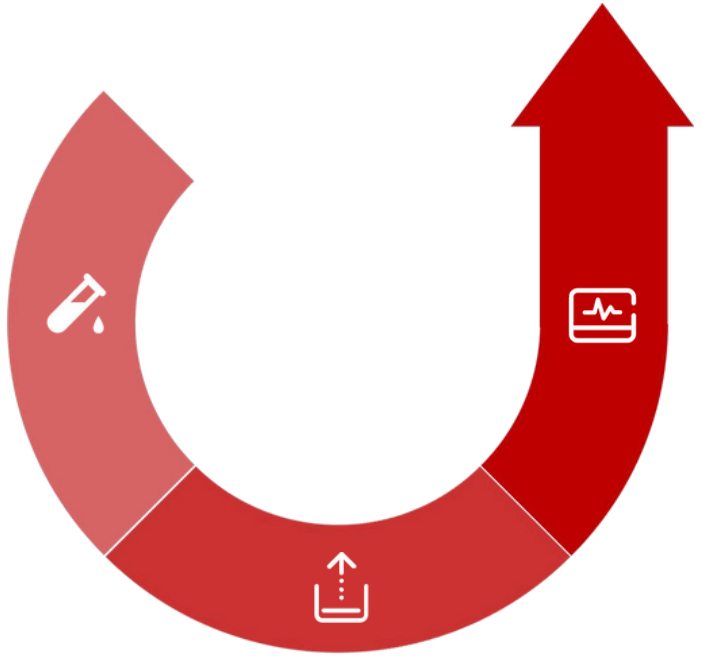
· Internal control gene for validity

· Lyophilized reagents, shipped at room temperature

- Fast

Nucleic Acid Reagents:

1. Ready for use without thawing
2. Individually packed for single test



PCR

35 min

1. Time to result in
2. Simultaneously test up to 16 samples

HyperLyse Extractor

Process 1 to 4 samples in only *10 min*

- Accurate

PCR

1. 40 cycles amplification
2. Real time qPCR with proprietary thermal control technology

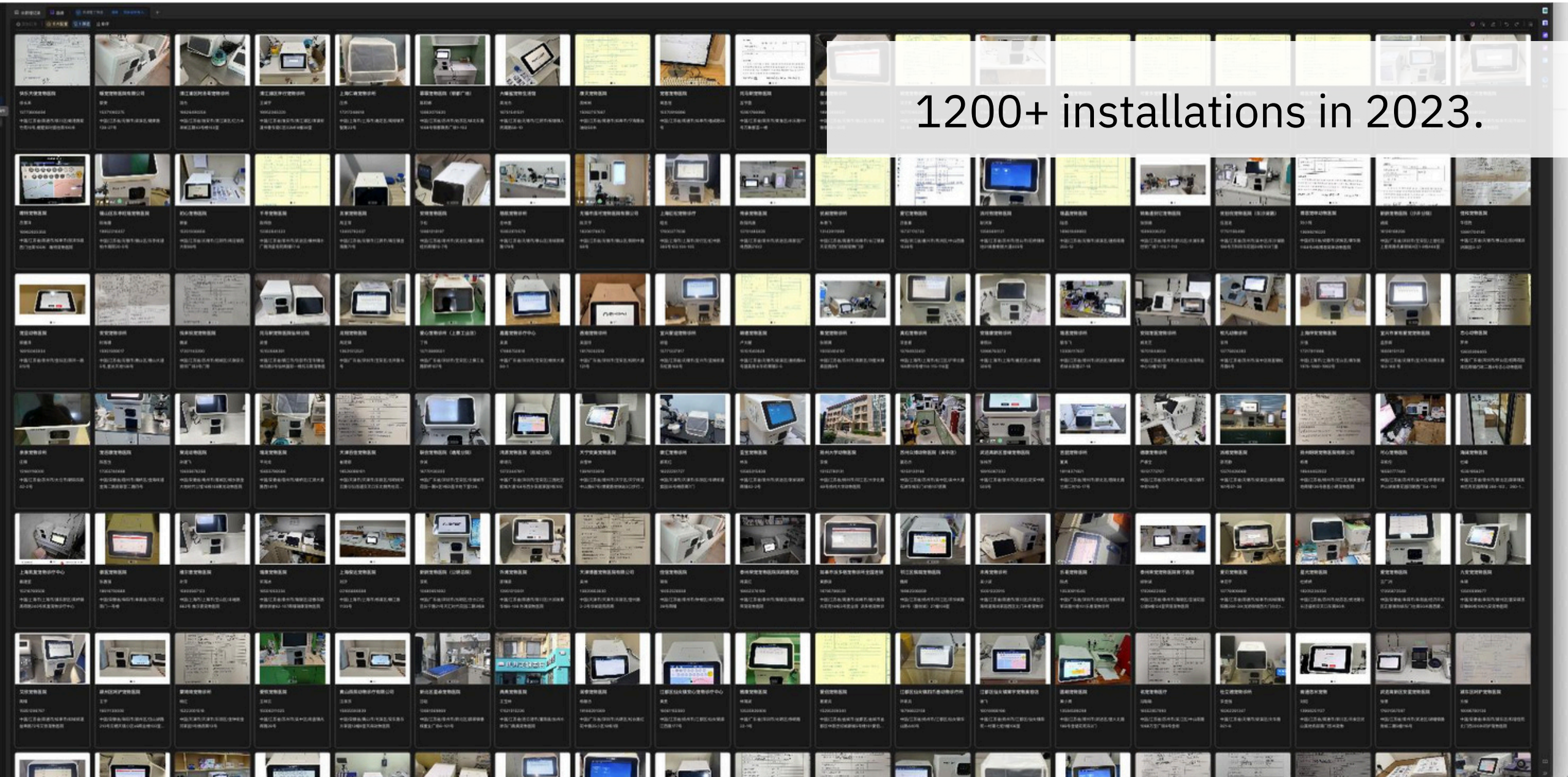
Nucleic Acid Extraction

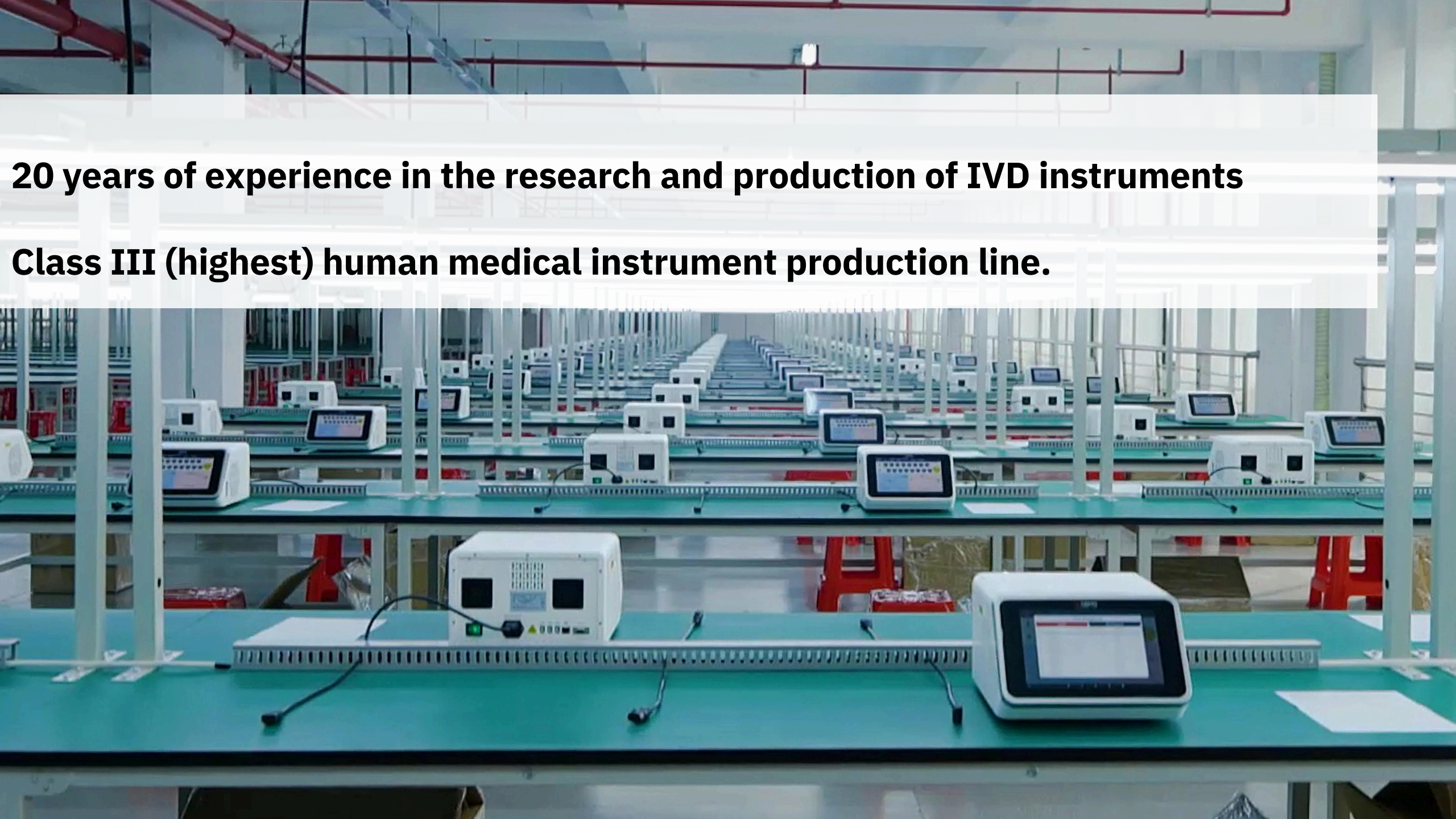
1. Heated at 90°C for effective lysing and extracting nucleic acids
2. Fully automated extraction, eliminating human errors

Nucleic Acid Reagents:

1. Internal control genes for validity
2. Quantitative signal capture throughout PCR process

Quality





20 years of experience in the research and production of IVD instruments

Class III (highest) human medical instrument production line.

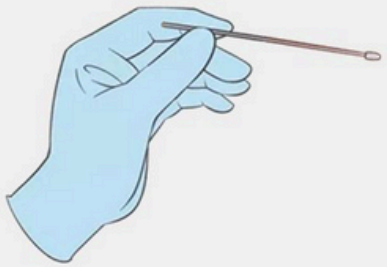
Part.2

Operation Instructions

2

- Take Sample → Auto Extraction → Add Sample → PCR Test

1

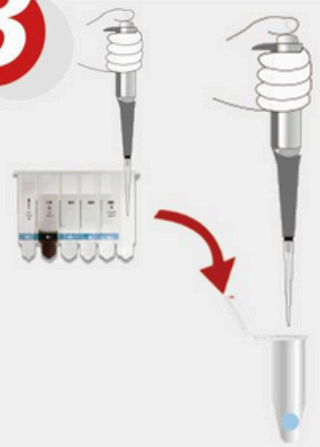


Take Sample

2

Auto Extraction

3



Add Sample

4

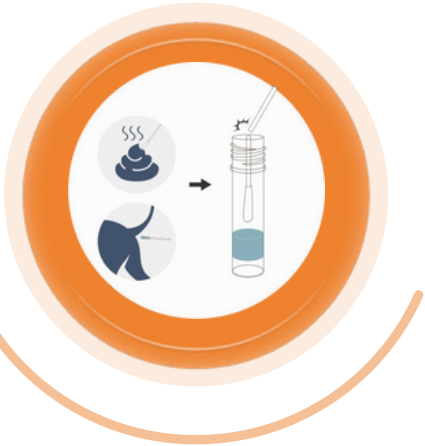
PCR Test

Take Sample —— Sample Handling

Eye, nose, throat swab

1. Eye, nose, and throat swab: Use a swab to moderately wipe the oral, nasal secretions, and conjunctival secretions.

2. With the swab in the sample buffer, shake it thoroughly to fully dissolve the pathogen on the swab into the buffer



Fresh feces, swabs

1. Fresh feces swab: Use a swab to collect an appropriate amount.

2. Anal swab: Wet the swab with diluent first and then collect the sample.

3. With the swab in the sample buffer, shake it thoroughly to fully dissolve the pathogen on the swab into the

Ascites, pleural effusion

Collect cat thoracic fluid and abdominal fluid using a syringe for subsequent extraction.

Blood

EDTA anticoagulated blood: take whole blood from EDTA tube, then run extraction.

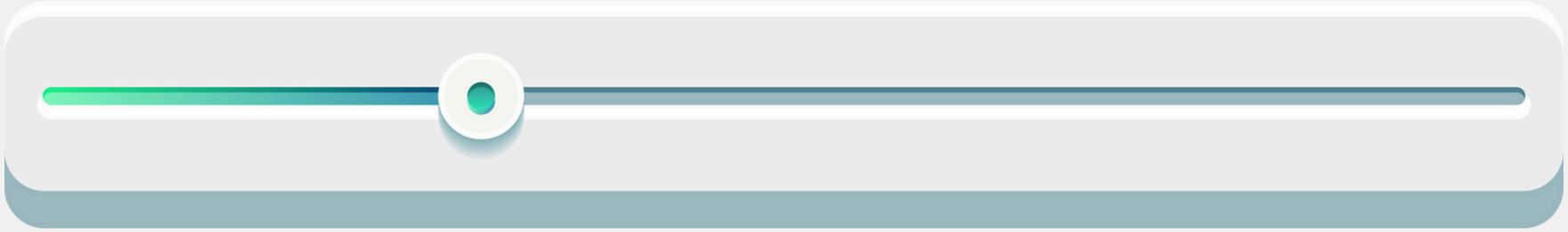
Specimen storage

Samples used for nucleic acid extraction and detection should be tested as soon as possible.

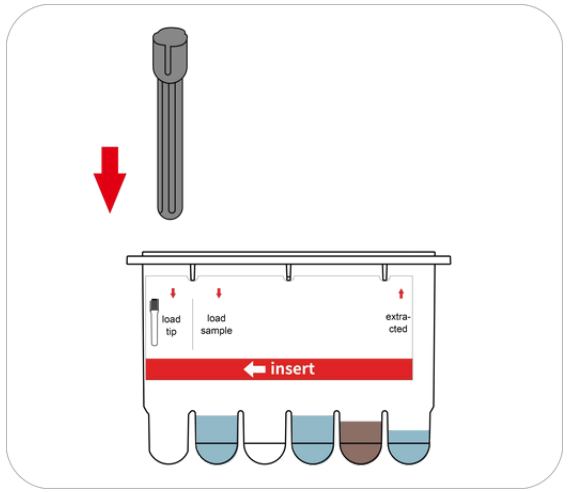
Samples to be tested within 24 hours can be stored at 4°C.

Samples that can not be tested within 24 hours should be stored at -20°C for up to 10 days.

Avoid repeated freezing and thawing of samples.

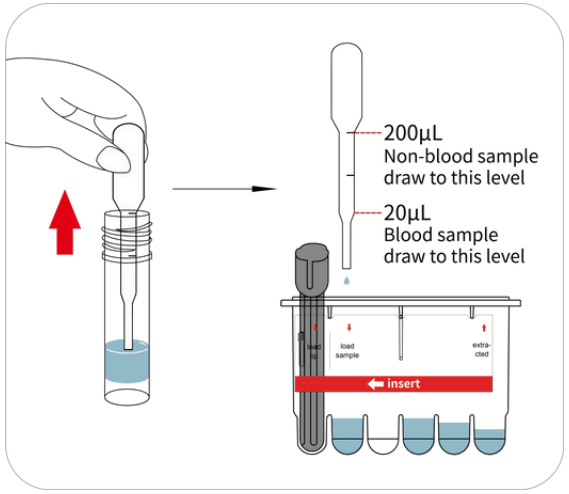


Auto Extraction



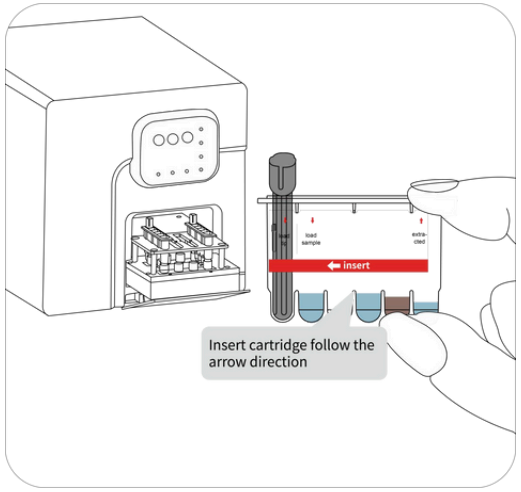
Step 1: Insert magnetic sleeve tip

Tear top seal off the extraction cartridge.
Insert the magnetic sleeve into the
"load tip" well

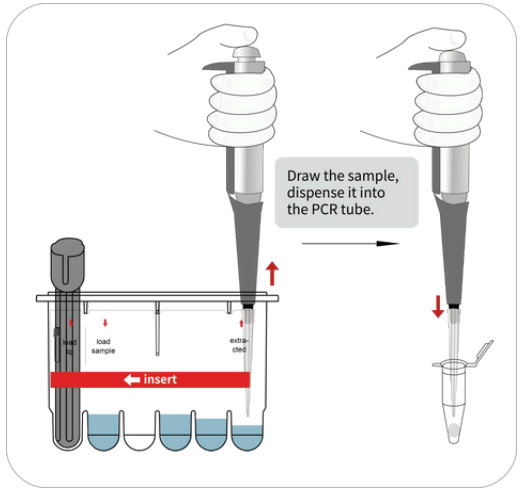


Step 2: Add sample

Use a pipette to transfer the sample
(volume and prepared as instructed),
and dispense it into the "load sample"
well



Step 3: Nucleic acid extraction
Place extraction cartridge into the extractor rack.
Press "⏏" button to retract rack into the instrument.
Press "►" button to start extraction.
After extraction is complete, the rack is ejected automatically.



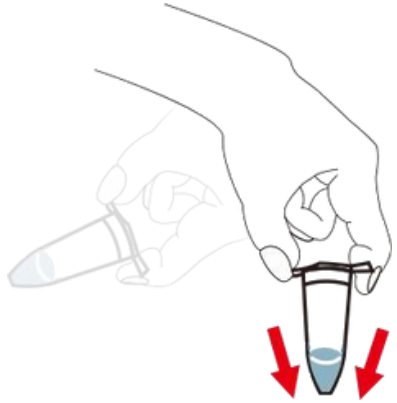
Step 4: Retrieve extracted nucleic acid
Using the 20µL pipette to add extracted sample to each PCR tube. Firmly close the PCR tube.

Attention:

Insert the extraction cartridge following the arrow direction.
If the orientation of the cartridge is incorrect, it cannot be inserted properly.

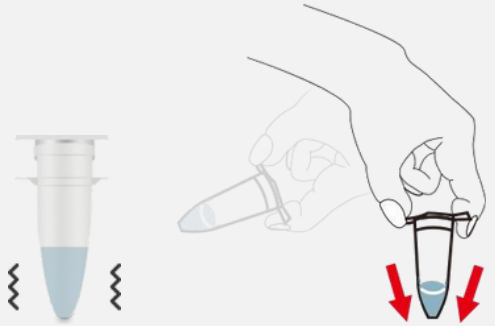
Mixing in the PCR Tubes

First, shake all liquid to the bottom of PCR tube



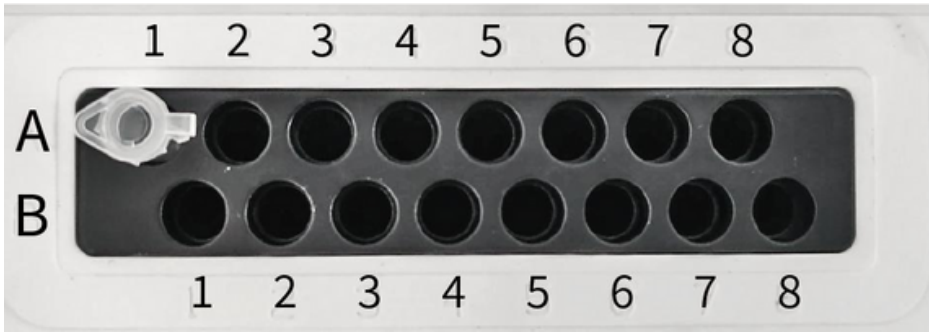
Vortex Mixer:
Use vortex to mix the PCR tube thoroughly, for 5 seconds.
After mixing, make sure all liquid is at bottom of PCR tube, by shaking the tube again.
(optional : use a small centrifuge for 3 seconds to shift all liquids to the bottom.)
Finally, insert PCR tubes into the instrument for detection.

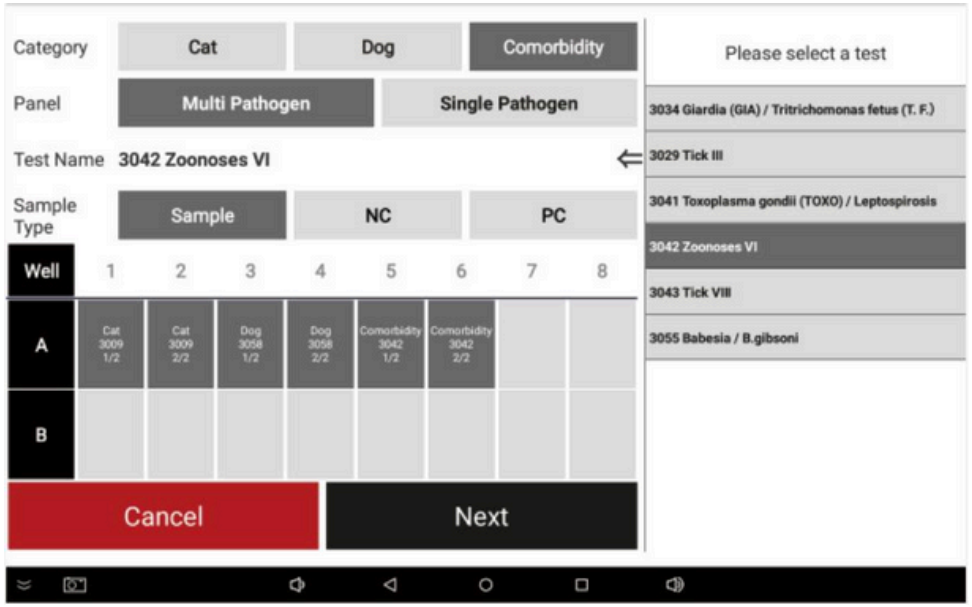
Manual mixing:
If a vortex mixer is not available, flick the PCR tube (ensure the liquid inside is moved for mixing action). Shake all liquid to bottom. Repeat 3-5 times to ensure thoroughly mixing and all liquid is at the bottom, before proceeding to PCR testing



PCR Test

① Place the PCR tubes into the testing wells of the PCR instrument. For panel test with more than one tubes, pay attention to their sequence. Insert tubes from left to right according to the numbers labeled on the cap of PCR tube.

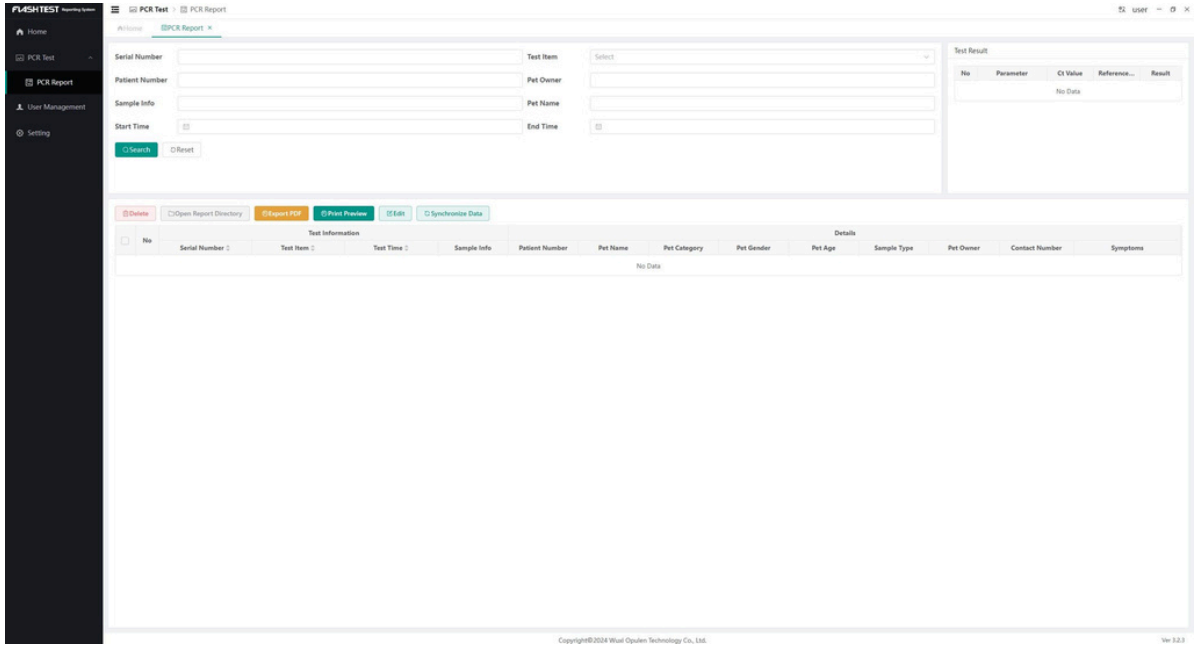




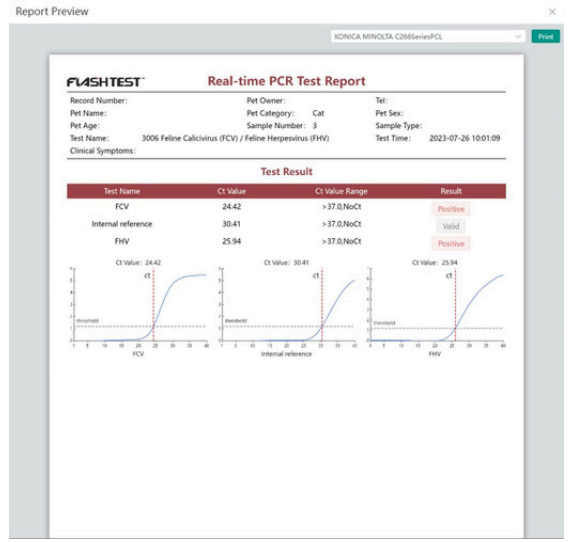
② Select the test and well positions on the PCR. Then close the heated lid and start test.

Report Management System

Login to the report system



View, edit, delete, print reports



View and print report PDF

Test Report System

Search for the report based on sample information, pet details, test time, etc.

Test Results

Function menus

The test information and details will be displayed here. You can preview, edit, delete, and print reports

Part.3

FAQ

- Tips for sampling
- Tips for nucleic acid extraction
- Tips for adding sample
- Other tips

3

Tips for sampling

① Eye, nose, throat swab:

- First collect from the mouth and then from the eyes and nose.
- Collect liquid only; avoid solid or viscous substances.

② Fresh Feces Swab:

- Preferably use a rectal swab
- When collecting fresh feces, use a small amount to form a thin layer of sample on the swab tip.

③ Insert swab into sample buffer:

- Break the swab, invert buffer tube for approximately 10 times, or vigorously shake it for more than 20 seconds.

④ Blood Samples:

- Use whole blood with EDTA anticoagulant; do not use serum or plasma.

Nucleic Acid Extraction Sample Volume：

Blood Samples: 20μL

Non-blood Samples: 200μL

Tips for nucleic acid extraction

Before using the extraction reagent kit, shake the cartridge to mix the magnetic beads.

Tips for adding sample

① The PCR reaction volume is 20μL. Recommend using a 20μL fixed volume pipette, (one-level aspiration, two-level dispensing). After adding sample, the liquid level in the PCR tube is approximately 5 millimeters.

② Mixing in PCR tubes:
First, flick the liquid to the bottom of the tube (this step is crucial!). Then, use a vortex mixer or manually mix.

Make sure all liquid is at the bottom of the tube (no hanging liquid drops on cap or wall) before and after the mixing.

Make sure all solid lyophilized PCR master mix is fully dissolved.

Other Tips

① The PCR tubes must be firmly closed.

② After using the extraction reagent kit, seal it with the provided sealing film.

③ Dispose of the following items in the biohazard bag after use:

- sample buffer
- PCR tubes
- Sealed extraction reagent kit
- Pipette tips

④ Turn the UV light once a day for disinfection, after using the extraction instrument.

⑤ Do not repeat the test! One PCR test kit can only be used for one-time nucleic acid test!

> Retesting means redo the entire process, including sampling, nucleic acid extraction, and PCR testing, with new test kits.
>
> Never repeat the test with used test kits.

⑥ During the PCR test, do not open the heated lid.

PCR +, but

there is no symptoms...

1. In early, presymptomatic stage of infection, other tests are negative
2. Low viral load and strong immune system,

   carrying pathogen but not infected
3. Vaccine cross reaction
4. Contamination, especially on the inside of PCR tubes

PCR -, but

rapid test +, or

there are symptoms...

1. sampling and handling error: identify handling errors and try again
2. virus mutated, off target
3. rapid test accuracy is limited, possibily false positive
4. symptoms is caused by pathogens other than what was tested

Part.4

What’s more...

- OTA Software Upgrade
- Growing test list
- More in-house solutions on the way

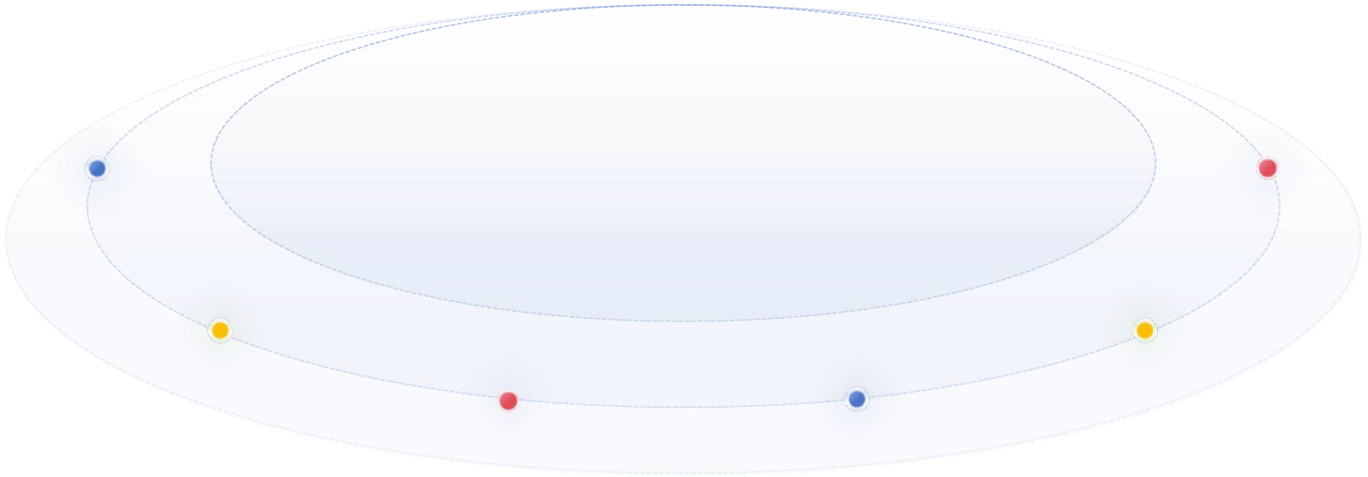
Automatic Software Upgrade

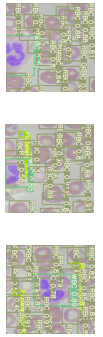
- Receive software updates Over-the-Air (OTA) when PCR is connected online

- Receive new tests programs through OTA updates

More to Come...

PCR





AI + Cytology
(microscope)

Immunoassay

Biochemistry

AI+Ultrasound

FREI VON TIER-
VERSUCHEN

best AnimalCARE

we are here for your pet