





## 01 PRINCIPLE

- The main pathogens that cause common infectious diseases in pets are viruses, bacteria, mycoplasma and chlamydia, and parasites, which seriously endanger the health of pets.
- The cartridge of the PetReady detection system combines microfluidics, nano-superparamagnetic beads nucleic acid extraction, fluorescence real-time PCR, enzyme and reagent critical state preservation technologies, which is pre-installed with the extraction and amplification reagents, so to realize the fully-closed automatic output from the sample to the gene detection result. It avoids the shortcomings of the conventional molecular detection with false positive results, although with high sensitivity.









Sampling

Load cartridge to the machine

Report

# 03 AUTOMATIC RESULTS







12600	Start Cycle 3, 3	Ct co ,21.86	No.: 6023A1906 Sample type: Pipura, fluid Recept date: 2020/07/22
10500 8400 6300	End Cycle 15, 19 Judgement Analysis	Result NEG	Clinical symptoms: 7.1 Gastroonteritis, was discharged three days after admission, everything was normal during the period, 7.15 Fever 40°C, antibiet c treatment for three days, fever chenomenon repeated, during the period, the spirit is normal, the appetite is normal, the abdominal circumference
4200 2100 0 8 16 24 32	Ct 00,21.86	Negative result	Increases. X-rays show more abdominal fullo. Test incloses. Fully automatic integrated real-time fluorescence intensity Test results off term Felle cororavitys Amplified Of value 27/72
Amplification Melting	Settings (5) Test Name 20200901_094546		Fathogen detection Init. 2024/COOLS cooles/init Pathogen test rest bill contrel 0 8 16 24 32 40 Cycle Oud by Control Ct. 2024. Valid for this test result Explanation of ideal results. The report is only a coronavirual detection report in the sample, the results are for doctors' reference.
3000 0700 8400 5100	Auto Manual Threshold 65, 62		Diagnosis: Abdominal effusion samples were positive for coronavirus in dats, suggesting that the dat had infectious
3800 1500 9200 6900	Start Cycle 3, 3   End Cycle 21, 19   Judy cmont Antivals	Ct     24.02,21.93       Result     POS++ (9.86E+4 Copies/ml)	Veter varian Drlin Report oster 2020/07/2215/30
4600 2300 0 8 16 24 32 4	Ct 24.02,21.98	Positive result	This recort is responsible for this sample only and the results are for physical is reference. A so Mes of W

This product is controlled under the highest international quality management system ISO 13485, and can be widely used in laboratories for animal-related diseases detection.



## **ADVANTAGES** 05



#### Easy manual operation in 2 minutes

Place the swab in the buffer and mix well. And then take the supernatant, add it to the cartridge, add magnetic beads with internal control, and run the built-in program automatically to get the result.



#### Scanning bar code or click Rapid Run, no need to set the program

Load the complex program settings by scanning bar code on the kits, easy to operate.



#### Real-time Fluorescent PCR Technology, High Sensitivity

It combines the specificity and sensitivity of PCR detection technology, which shortens the window period of disease detection, and all the extracted nucleic acids from the sample enter the reaction system, which greatly improves the sensitivity



## Fully-closed Microfluidic Kit, No Contamination

PetReady cartridge with the unique design can control reagents flow in one direction. Owing to the microfluidic valves and sealed separate units, it avoids the contamination. So the system can be placed under the ordinary lab environment.





### From sample to report as less as in 1 hour

The whole process, including the extraction, purification, amplification and detection of sample, will be done in about one hour, which shortens the period of detection.



Multi-channel on-demand inspection, Timely diagnosis

One machine can detect four different samples or items at any time, it realizes the function of four individual machines.



Complete range of kits, Meet various testing needs

The available kits cover common detection items of pathogens. In addition, there are more kits coming soon.



#### Pathogen Quantitative Detection, Monitoring the treatment process

When the report is made, it prompts the concentration of the pathogen, so to assist in judging the degree of the disease, and it is also used to monitor the treatment effect and guide the medication process.

Pets Automatic Integrated Gene Detection System

## 06 COMPARES



## Extraction of microfluidic nano-magnetic beads and real-time fluorescent PCR Detection



The structure of cells in the sample was broken under the action of heating and reagents, so to release the nucleic acids, which were specifically bound to the nano-magnetic beads.



Under the action of a controlled changing magnetic field, nucleic acid substances can be purified through the various different reagents of the microfluidic kit.



Under the high-precision semiconductor based temperature control, the polymerase chain reaction is carried out. And the nucleic acids are amplified to hundreds of millions of times, finally detected by the low-light photomultiplier tube (PMT) so to get the results.

## **Comparison With Test Strip**

PetReady system	Test Strip
1-10 viruses can be detected in principle	The estimated volume of tested virus is 10 <sup>6</sup>
No window period basically	The window period is 1-2 weeks
Accuracy>98%	Accuracy 60%-70%
Judge the degree of illness according to the Ct value detected by system	Judge the degree of illness according to the experience or roughly automatically

### **Comparison With Other Molecular Diagnostics**

PetReady system

One-step RT-PCR

Portable isothermal amplification method Extraction + Amplification (Automatic)

Anti-contamination	No contamination	Contaminated Easily	Contaminated Easily	Contaminated Easily
Detection Performance	4 individual channels, detection on-demand	Test one item at one time	Test one item at one time	Test one item at one time
Accuracy	Extremely high	Medium	Low	High
Sensitivity	Extremely high	Medium	Low	High
Sample Pretreatment	No	Yes	Yes	Yes
Detection Time	About 1 hour	About 1.5 hour	About 1 hour	About 1.5 hour

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### AIGS >

Model/Order No.	PetReady 200
Light source	LED
Detector	PMT photomultiplier tube
Temperature control module	Semiconductor
Block temperature range	40°C-99.9°C
Block temperature fluctuation	≤±0.5°C
Block temperature accuracy	≪0.5°C
Temperature display accuracy	0.1°C
Dyes	FAM, ROX
Display	7-inch color touch screen
Power supply	AC100-240V,50/60Hz,350W
Data connector	LAN, USB, WiFi
Size	Length 380mm* Width 305mm* Height 343mm

## Recommended Supporting Products

Product name	Order No.	
GeneReady Utimate	BSH-CL2	
GeneReady Tissue P I Kit	KT01-200	

\* Sample type: tissue, feces, other samples that need pre-processing.

L	Product name	Order No.	Con Con March
	Mixer	V01001	

\* For shaking and mixing reagents and samples.

Product name	Order No.	
Mini centrifuge	SpinReady 5000	

\* Used for sample centrifugation to get the supernatant.



Product name	Order No.
AccuReady M Single Channel 0.5-10μL	M01020
AccuReady M Single Channel 20-200μL	M01060





### Detection Kits 🕨

Product name	Packing	Description	Order No.
Canine Distemper Virus (CDV) Detection Kit	24 Tests/Kit	RNA	B0002A
Canine Parvovirus (CPV) Detection Kit	24 Tests/Kit	DNA	B0003A
Canine Coronavirus (CCV) Detection Kit	24 Tests/Kit	RNA	B0004A
Canine Herpes Virus (CHV) Detection Kit	24 Tests/Kit	DNA	B0006A
Pseudorabies Virus (PRV) Detection Kit	24 Tests/Kit	DNA	B0021A
Rabies Virus (RV) detection kit	24 Tests/Kit	DNA	B0022A
Canine Adenovirus (CAV-1, hepatitis) Detection Kit	24 Tests/Kit	DNA	B0023A
Canine Adenovirus (CAV-2, respiratory tract) Detection Kit	24 Tests/Kit	DNA	B0024A
Canine Heartworm (Di) Detection Kit	24 Tests/Kit	DNA	B0026A

Feline Parvovirus (FPV) Detection Kit	24 Tests/Kit	DNA	B0005A
Feline Coronavirus (FCoV) Detection Kit	24 Tests/Kit	RNA	B0008A
Feline Herpes Virus (FHV) Detection Kit	24 Tests/Kit	DNA	B0009A
Feline Calicivirus (FCV) Detection Kit	24 Tests/Kit	RNA	B0010A
Mycoplasma Feline (MF) Detection Kit	24 Tests/Kit	DNA	B0011A
Chlamydia Feline (CF) Detection Kit	24 Tests/Kit	DNA	B0012A
Feline Leukemia Virus (FeLV) Detection Kit	24 Tests/Kit	RNA	B0013A
Tox Gondii (Tox) Detection Kit	24 Tests/Kit	DNA	B0015A
Leptospira (Lept) Detection Kit	24 Tests/Kit	DNA	B0016A
Barton's Disease (Bar) Detection Kit	24 Tests/Kit	DNA	B0017A
Mycoplasma Haemophilus (Mha) Detection Kit	24 Tests/Kit	DNA	B0018A
Bordetella (BB) Detection Kit	24 Tests/Kit	DNA	B0019A

\* More detection kits coming soon!



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