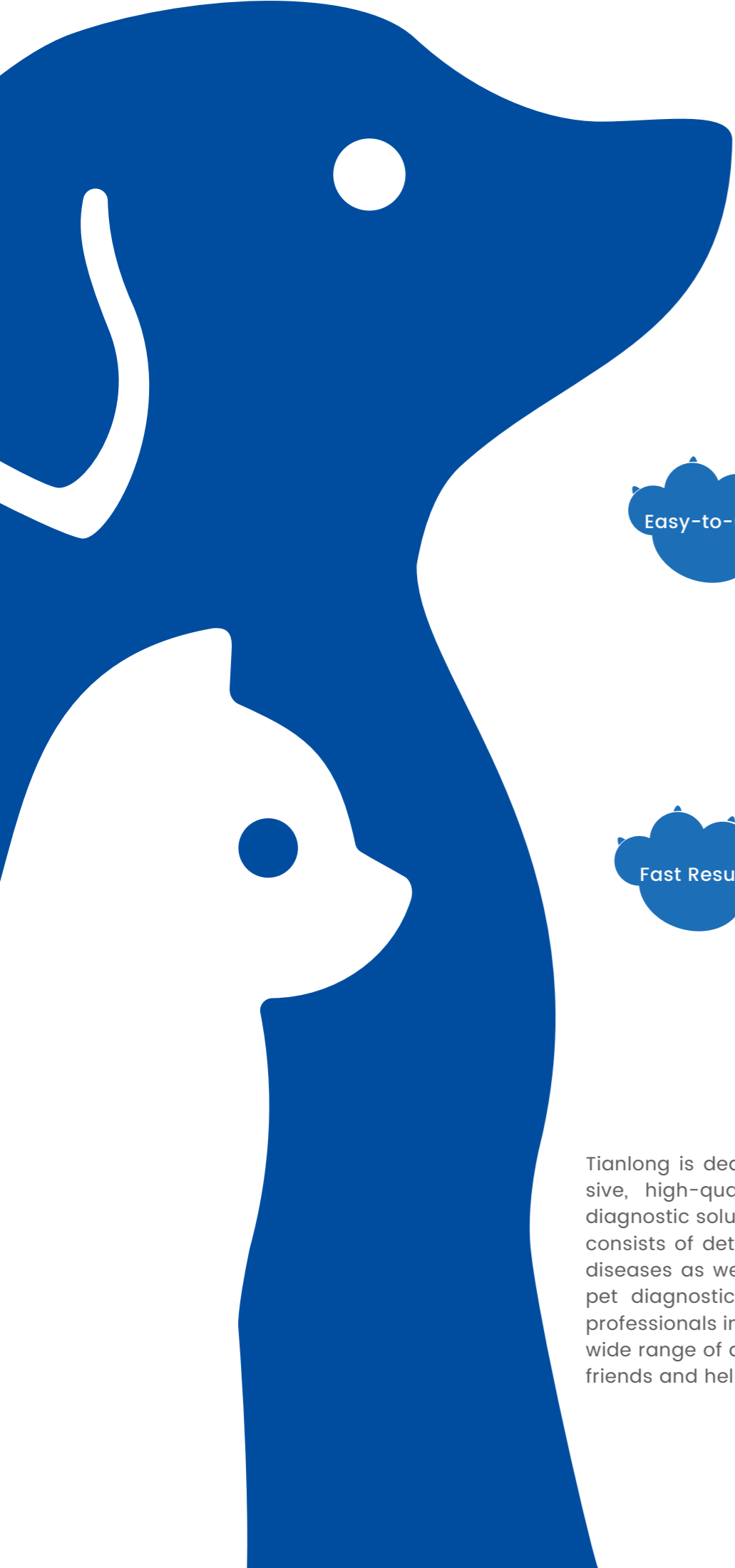


Bring Technology to Life



Tianlong Science and Technology
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Septembre 23, 2024 / Version 2.0

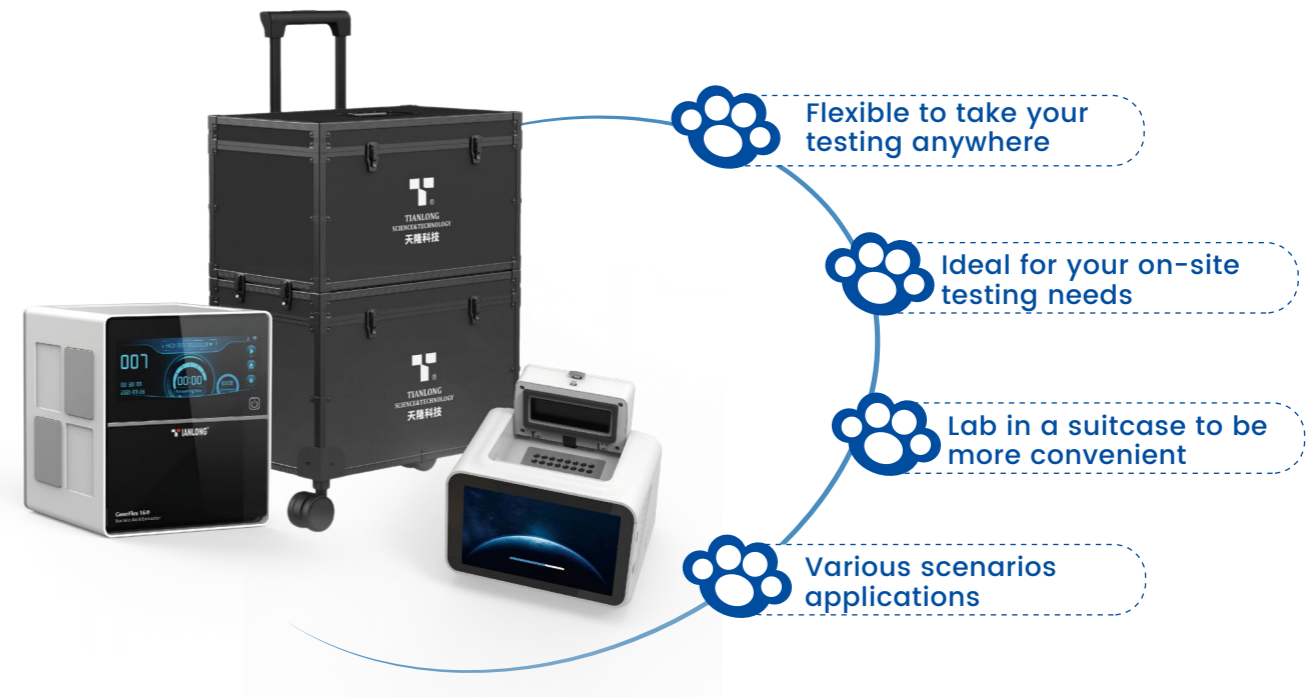


Tianlong is dedicated to providing comprehensive, high-quality and time-efficient in vitro diagnostic solutions for pets. Our robust portfolio consists of detection solutions for feline, canine diseases as well as zoonosis diseases. Tianlong pet diagnostic solutions can assist veterinary professionals in the screening and diagnosis of a wide range of diseases affecting our companion friends and help them live their healthy lives.

iGenecase 1600

Diagnostics-in-a-Suitcase

Tianlong suitcase laboratory iGenecase 1600 is a good companion for pet diagnostics. It contains all necessary devices and compatible consumables for PCR detection. The small, mobile laboratory fitting in a suitcase can deliver test results quickly and accurately, which is ideal for your on-site testing needs. With mobile power supply, professionals can start the experiment anywhere.



GeneFlex 16

Automatic Nucleic Acid Extractor



- Small Footprint**
- Automated Workflow**
- Immediate Results**

Gentier mini

Portable Real-Time PCR System



- Portable**
- Fast**
- Powerful**

SPECIFICATIONS

iGeneCase 1600 Diagnostics-in-a-Suitcase

Weight	33 kg
Dimensions	500mm (L) × 300mm (W) × 755mm (H)
Automatic Nucleic Acid Extractor	
Model	GeneFlex 16
Sample Throughput	16
Maximum Processing Volume	1700µL
Recommended Sample Volume	200-500µL
Compatible Consumables	6-tube strips
Mixing Method	Rotary Mixing
Rotation Speed	100~3000rpm
Temperature Control Range	Temperature control separately for lysis and elution. Temperature range from 30°C to 120°C.
Temperature Control Accuracy	Heating speed: 4.0±0.2°C/s. Temperature accuracy: ±1.0°C. Temperature uniformity: ≤1.0°C.
Reagent Identification	Automatic identification of reagent information and running the assays
Magnetic Bead Residue	≤1%
Weight	7.4 Kg (net)
Dimensions	210mm (L) × 229mm (W) × 242mm (H)

Portable Real-Time PCR System

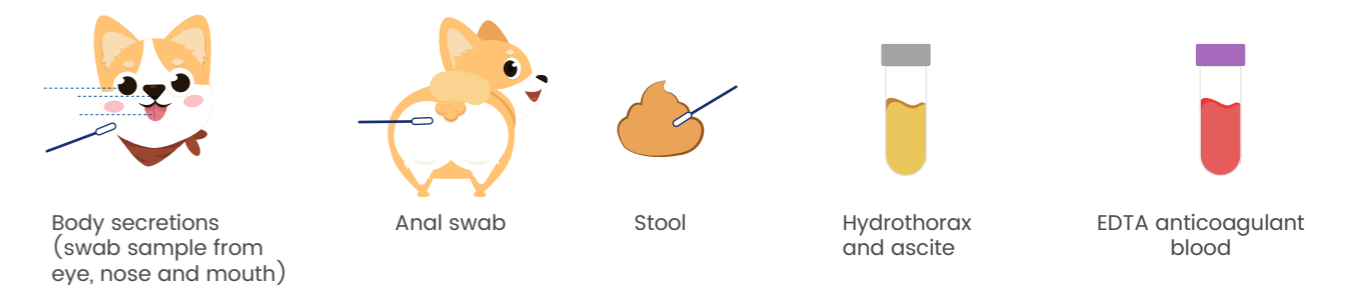
Model	Gentier mini
Throughput	16
Fluorescence Channels	2
Compatible Consumables	0.2mL transparent single tubes, and 8-strip tubes
Dye Compatibility	F1: FAM, SYBR Green I, LC Green, Eva Green, SYTO 9 F2: HEX, VIC, TET, JOE
Max Heating Rate	≥5.0°C/s
Max Cooling Rate	≥ 4.0°C/s
Accuracy of Thermo Control	≤ 0.1°C
Weight	3.2Kg
Dimensions	205mm (L) × 156mm (W) × 153mm (H)

Pet Diagnostic Kit

(Fluorescence PCR Method)



SAMPLE TYPES



KIT COMPONENT

Number of reactions	4 Tests
Pets Pathogens Nucleic Acids Extraction Reagent	4 packs
Pets Pathogens Fluorescence PCR Detection Reagent	4 packs
Magnetic Rod Sleeve	4 packs
Instruction for Use (IFU)	1 piece

REAGENT LIST

Feline

Product Name	Targets	Sample Types	Specifications
Feline Respiratory 5 Types Pathogen Panel	FHV-1, FCV, MF, CF, Bb	Body secretions (swab sample from eye, nose and mouth)	4T/Kit
Feline Stomatitis 4 Types Pathogen Panel	FeLV, FIV, FHV-1, FCV	Body secretions (swab sample from eye, nose and mouth) + EDTA anticoagulated blood	4T/Kit
Feline Coronavirus/ Infectious Peritonitis Virus (FCoV/FIPV)	FCoV, FIPV	Hydrothorax and ascite	4T/Kit
Feline Parvovirus (FPV)	FPV	Anal swab	4T/Kit
Feline Diarrhea 5 Types Pathogen Panel	FPV, FCoV, FAsTV, FBoV-1, FeChPV	Anal swab	4T/Kit
Feline Diarrhea 7 Types Pathogen Panel	FPV, FCoV, FAsTV, FBoV-1, FBoV-2, FBoV-3, FeChPV	Anal swab	4T/Kit
Feline Anemia 4 Types Pathogen Panel	FIV, FeLV, Bartonella henselae, Mhf	EDTA anticoagulated blood	4T/Kit

Canine

Product Name	Targets	Sample Types	Specifications
Canine Babesia Canis/Gibsoni	Babesia canis, Babesia gibsoni	EDTA anticoagulated blood	4T/Kit
Canine Distemper Virus (CDV)	CDV	Body secretions (swab sample from eye, nose and mouth)	4T/Kit
Canine Respiratory 7 Types Pathogen Panel	CDV, CIV, CPIV, Bb, MC, CC, CAV-2	Body secretions (swab sample from eye, nose and mouth)	4T/Kit

Canine

Product Name	Targets	Sample Types	Specifications
Canine Anemia 7 Types Pathogen Panel	Babesia canis, Babesia gibsoni, Ehrlichia canis, Anaplasma phagocytophilum, Hemotropic Mycoplasma, Hepatozoon canis, Borrelia burgdorferi	EDTA anticoagulated blood	4T/Kit
Canine Parvovirus/ Coronavirus (CPV/CCoV)	CPV,CCoV	Anal swab	4T/Kit

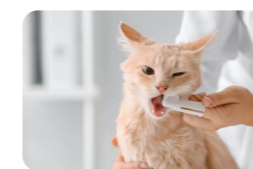
Feline & Canine

Product Name	Targets	Sample Types	Specifications
Feline/Canine Diarrhea 6 Types Pathogen Panel	Giardia lamblia, Tritrichomonas foetus, Pentatrichomonas hominis, Cryptosporidium, Coccidium, Helicobacter pylori	Stool/Anal swab	4T/Kit

Zoonosis

Product Name	Targets	Sample Types	Specifications
Zoonotic Diseases 3 Types Pathogen Panel	Toxoplasma gondii, Leptospira, Bartonella henselae	EDTA anticoagulated blood	4T/Kit
Zoonotic Diseases 6 Types Pathogen Panel	Toxoplasma gondii, Leptospira, Bartonella henselae, Dirofilaria immitis, Borrelia burgdorferi, Rickettsiae	EDTA anticoagulated blood	4T/Kit

APPLICATION AREA



Vet Clinic



Animal Hospital



Pet Lab

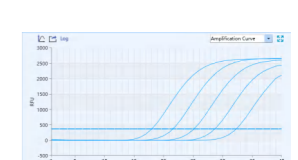
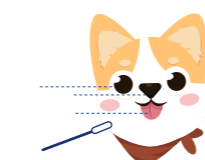


Animal CDC



Research Institute

ASSAY WORKFLOW



Feline Respiratory 5 Types Pathogen Panel Nucleic Acid Detection Kit

Common respiratory diseases in pets are mostly caused by pathogen infection, and the clinical symptoms after the onset are more similar, especially the clinical symptoms in the early stage are mild. But if not taking effective treatment in time, the disease can progress rapidly, resulting in serious consequences.

Tianlong Feline Respiratory 5 Types Pathogen Panel is suitable for in vitro qualitative detection of nucleic acids of Feline Herpesvirus-1(FHV-1), Feline Calicivirus(FCV), Mycoplasma felis(MF), Felidae chlamydiae(CF), Bordetella bronchiseptica(Bb) in cat oral nasopharyngeal swab samples. It aims to quickly and accurately detect common feline respiratory pathogens, assisting in the diagnosis of feline respiratory infections and public medical management.



FEATURES

5 in 1



Simplify Laboratory Workflow

Differential diagnostics of the five feline upper respiratory pathogens in a single run, 5 in 1 test for Feline Herpesvirus-1(FHV-1), Feline Calicivirus(FCV), Mycoplasma felis(MF), Felidae chlamydiae(CF), Bordetella bronchiseptica(Bb), fast detection within 40 minutes for report



Stable and Convenient

Freeze-dried type reagent, easy for storage and transportation, also avoiding contamination



Endogenous Internal Control

With endogenous internal control in the kit to monitor and prevent false negative results effectively



High Precision

The precision values of intra and inter Ct values were all $\leq 3\%$



More accurate

Collocating with Tianlong extraction reagent makes your experiment results more accurate

DATA INTERPRETATION

Figure 1: Tianlong Feline Respiratory 5 Types Pathogen Panel gradient amplification curve

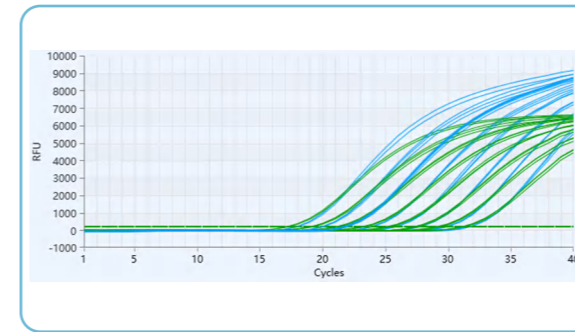
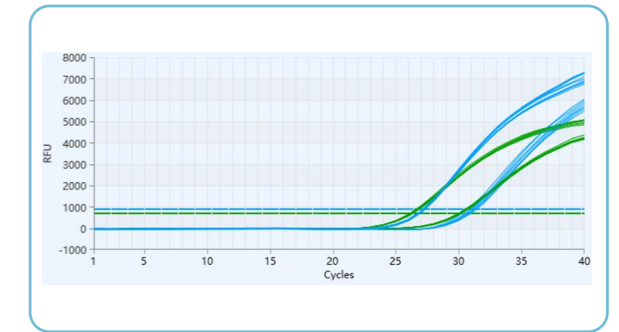


Figure 2: High concentration and low concentration repetitive amplification curve



APPLICABLE INSTRUMENT

	Product Name	Sample Throughput	Certification
	 Tianlong GeneFlex 16	16	CE/FDA
	 Tianlong Gentier mini	16	CE/FDA

ORDERING INFORMATION

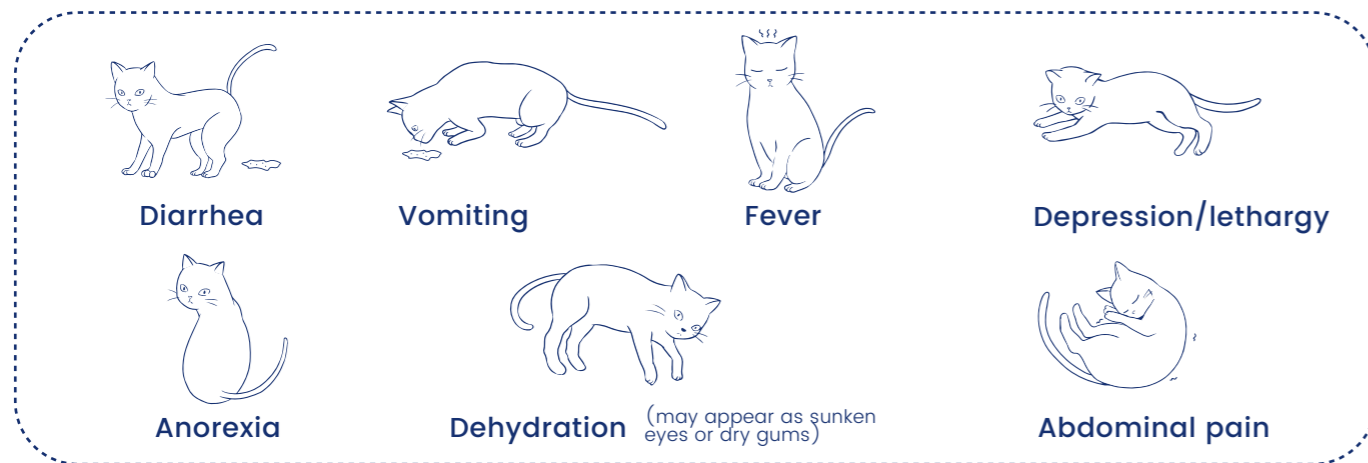
Product Name	Feline Respiratory 5 Types Pathogen Panel Nucleic Acid Detection Kit (Fluorescence PCR Method)
Cat.No	C001H
Specification	4T/Kit
Sensitivity	700 copies/mL
Target Pathogen	Feline Herpesvirus-1(FHV-1), Feline Calicivirus(FCV), Mycoplasma felis(MF), Felidae chlamydiae(CF), Bordetella bronchiseptica(Bb)
Specimen	Body secretions (swab sample from eye, nose and mouth)
Storage & Validity	2°C to 30°C for 12 months

Feline Parvovirus (FPV) Nucleic Acid Detection Kit

Feline Panleukopenia (also called feline distemper) is an acute, highly contagious disease of cats caused by feline parvovirus (FPV). Clinical manifestations are characterized by sudden onset of high fever, intractable vomiting, diarrhea, dehydration, circulatory disturbances, and a dramatic decrease in white blood cells. Feline panleukopenia is a big disease threat for cat since it carries a very high mortality rate, particularly in unvaccinated kittens.

Feline Parvovirus (FPV) Nucleic Acid Detection Kit developed by Tianlong is suitable for in vitro qualitative detection of feline parvovirus nucleic acid in feces, intestinal cleanse, and anal swab samples of affected cats. It aims to quickly and accurately detect common feline parvovirus and assist in the diagnosis and treatment of feline parvovirus infections.

SIGNS OR SYMPTOMS



FEATURES

- Reliable Detection**
Reliable detection of Feline Parvovirus Virus (FPV) in cats, fast detection and report in only 40 min (15 min for extraction, 25 min for PCR detection)
- Endogenous Internal Control**
With endogenous internal control in the kit to monitor and prevent false negative results effectively
- Stable and Convenient**
Freeze-dried type reagent, easy for storage and transportation, also avoiding contamination
- Providing Integrated Solution**
Provides a rapid test solution that detects FPV with a high degree of sensitivity and specificity
- High Precision**
The precision values of intra and inter Ct values were all <3%

DATA INTERPRETATION

Figure 1: Gradient concentration FPV amplification curve

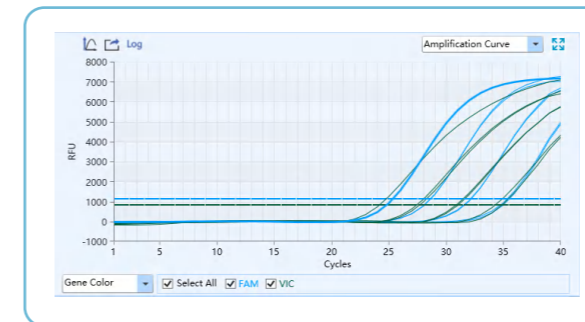
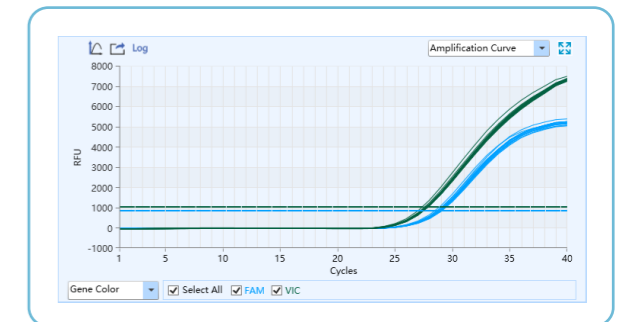


Figure 2: High concentration and low concentration FPV repetitive amplification curve



APPLICABLE INSTRUMENT

	Product Name	Sample Throughput	Certification
	Tianlong GeneFlex 16	16	CE/FDA
	Tianlong Gentier mini	16	CE/FDA

ORDERING INFORMATION

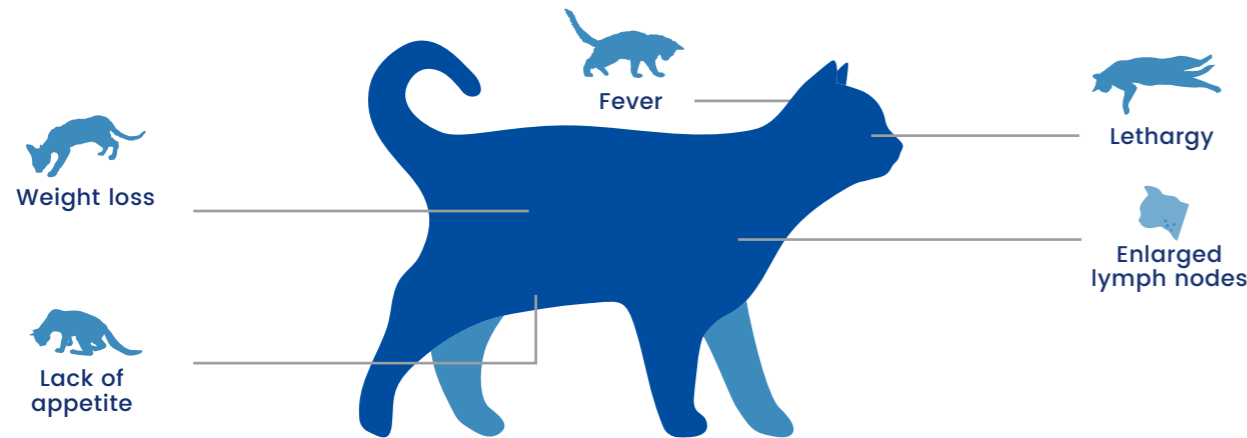
Product Name	Feline Parvovirus (FPV) Nucleic Acid Detection Kit (Fluorescence PCR Method)
Cat.No	C003H
Specification	4T/Kit
Specimen	Anal swab
Sensitivity	600 copies/mL
Precision	<3%
Storage & Validity	2°C to 30°C for 12 months

Feline Coronavirus/ Infectious Peritonitis Virus (FCoV/FIPV) Nucleic Acid Detection Kit

Feline Coronavirus (FCoV) is a common viral infection in cats that most often causes asymptomatic infection, but also cause mild diarrhea. FCoV can undergo mutations and transform into Feline Infectious Peritonitis Virus (FIP) virus. A small percentage of cats infected with FCoV will develop into FIPV, which leads to the fatal disease Feline Infectious Peritonitis.

Tianlong Feline Coronavirus/ Infectious Peritonitis Virus (FCoV/FIPV) Nucleic Acid Detection Kit provides a reliable and rapid solution for the qualitative detection of FCoV/FIPV nucleic acid in hydrothorax and ascite samples. The kit can assist professionals in the fast and accurate diagnosis of FCoV and FIPV infections.

SIGNS OR SYMPTOMS



FEATURES

- Simplified Workflow**
 Reliable detection and differentiation of FCoV and FIPV in one run
- Fast Detection**
 Fast detection and report in only 40 min (15 min for extraction, 25 min for PCR detection)
- Stable and Convenient**
 Freeze-dried type reagent, easy for storage and transportation, also avoiding contamination
- Endogenous Internal Control**
 With endogenous internal control in the kit to monitor and prevent false negative results effectively
- Providing Integrated Solution**
 Provides a rapid test solution that detects FCoV/FIPV with a high degree of sensitivity and specificity

DATA INTERPRETATION

Figure 1: Gradient concentration FCoV amplification curve

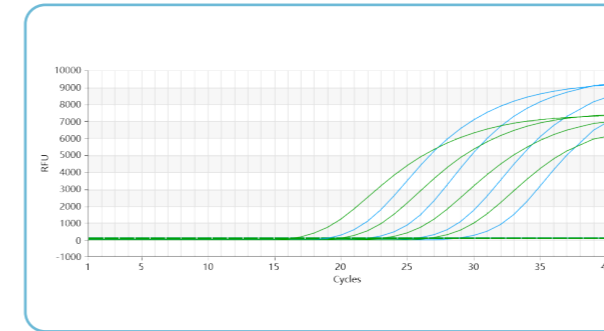
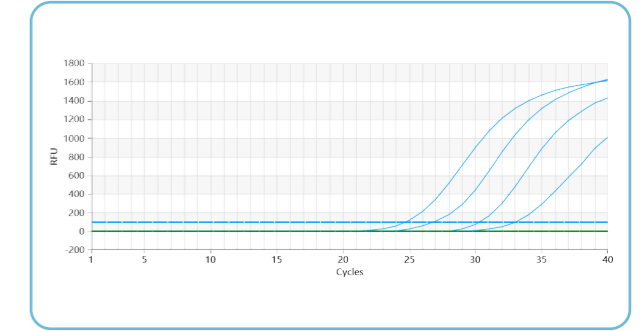




Figure 2: Gradient concentration FIPV amplification curve



APPLICABLE INSTRUMENT

	Product Name	Sample Throughput	Certification
Nucleic Acid Extractor	 Tianlong GeneFlex 16	16	CE/FDA
Real-Time PCR System	 Tianlong Gentier mini	16	CE/FDA

ORDERING INFORMATION

Product Name	Feline Coronavirus/ Infectious Peritonitis Virus (FCoV/FIPV) Nucleic Acid Detection kit (Fluorescence PCR Method)
Cat.No	C002H
Specification	4T/Kit
Specimen	Hydrothorax and ascite
Sensitivity	≤1000 copies/mL
Precision	<2%
Storage & Validity	2°C to 30°C for 12 months

Canine Distemper Virus (CDV) Nucleic Acid Detection Kit

Canine distemper is a contagious disease caused by the canine distemper virus (CDV). The distemper virus works by attacking the respiratory, gastrointestinal, and neurologic systems of dogs. This highly transmissible virus can also infect wild animals, such as raccoons, foxes, etc. Young or unvaccinated dogs are most susceptible.

Tianlong Canine Distemper Virus (CDV) Nucleic Acid Detection Kit provides a reliable and rapid detection solution for the qualitative detection of CDV nucleic acid in swab samples from eye, nose, and mouth of infected dogs. Based on the fluorescence PCR method, the kit can assist professionals in fast and accurate diagnosis of CDV infections.

SIGNS OR SYMPTOMS

- High fever
- Lack of appetite
- Discharge from the eyes and nose
- Vomiting
- Coughing
- Canine hyperkeratosis

TRANSMISSION ROUTE

- Airborne exposure (such as sneezing or coughing)
- Direct contact with an infected animal
- Shared food and water bowls from an infected animal
- Through the placenta

FEATURES

- Fast Detection**
Reliable and fast detection of Canine Distemper Virus (CDV), report in only 40 min (15 min for extraction, 25 min for PCR detection)
- Stable and Convenient**
Freeze-dried type reagent, easy for storage and transportation, also avoiding contamination
- Endogenous Internal Control**
With endogenous internal control in the kit to monitor and prevent false negative results effectively
- Providing Integrated Solution**
Provide complete solution including devices and reagents that detects CDV with a high degree of sensitivity and specificity
- GMP Certified**
Stick to the high-standard production process with GMP certification for qualified manufacture

DATA INTERPRETATION

Figure 1: Gradient concentration CDV amplification curve

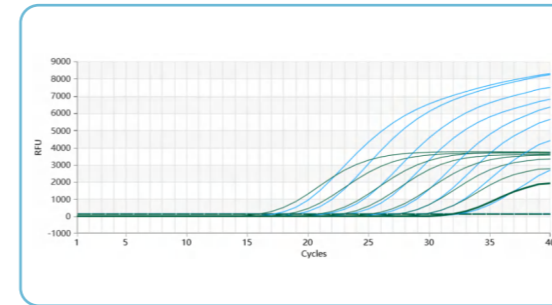
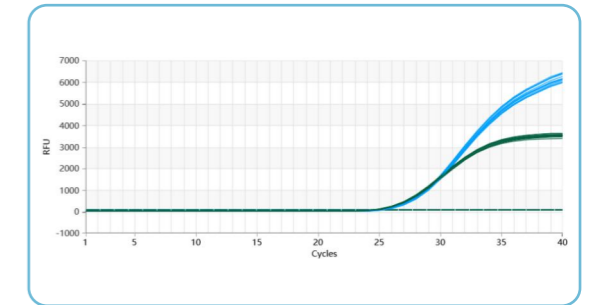


Figure 2: High concentration CDV repetitive amplification curve



APPLICABLE INSTRUMENT

	Product Name	Sample Throughput	Certification
Nucleic Acid Extractor	 Tianlong GeneFlex 16	16	CE/FDA
Real-Time PCR System	 Tianlong Gentier mini	16	CE/FDA

ORDERING INFORMATION

Product Name	Canine Distemper Virus (CDV) Nucleic Acid Detection Kit (Fluorescence PCR Method)
Cat.No	C101H
Specification	4T/Kit
Specimen	Body secretions (swab sample from eye, nose and mouth)
Sensitivity	≤1000 copies/mL
Precision	<1%
Storage & Validity	2°C to 30°C for 12 months

Attached File

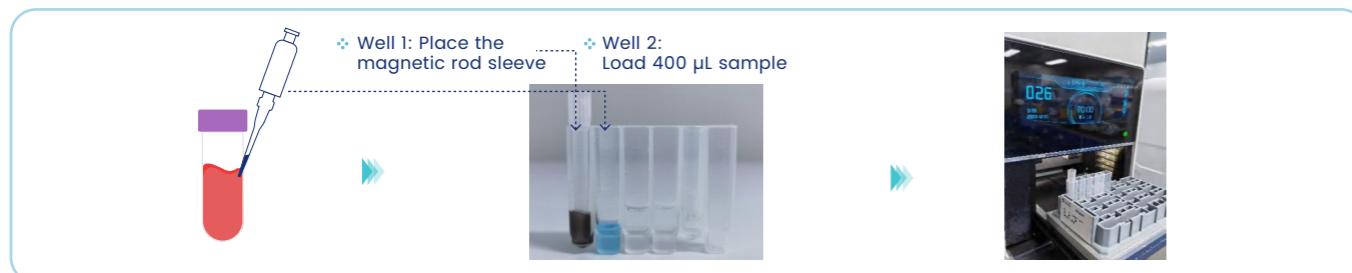
SOP for Pet Pathogens Detection

Step 1: Sample collection

Sample Type	Sample Processing
Body secretions (swab sample from eye, nose and mouth)	Moisten the sampling swab with normal saline; Collect the eye swab sample by fully wiping the moistened swab under the eye lid of the affected pet; Collect the nose and mouth swab by dipping the oral and nasal secretions; Then place the swab in a centrifuge tube with 1mL normal saline, fully mix and centrifuge the sample tube before use.
Anal swab	Moisten the sampling swab with normal saline; Swab the perianal or shallow into the anus of the affected pet for sampling; Then place the swab in a centrifuge tube with 1mL normal saline. Fully mix and centrifuge the sample tube before use.
Stool	Dip appropriate amount of stools with sampling swab and place it in a centrifuge tube with 1mL normal saline. Fully mix and centrifuge the sample tube before use.
Hydrothorax and ascite	Collect 500uL hydrothorax and ascite sample in a centrifuge tube with 500uL normal saline. Fully mix and centrifuge the sample tube before use.
EDTA anticoagulant blood	Use EDTA anticoagulant tube to collect the whole blood of the affected pet. Mix it upside down before use.

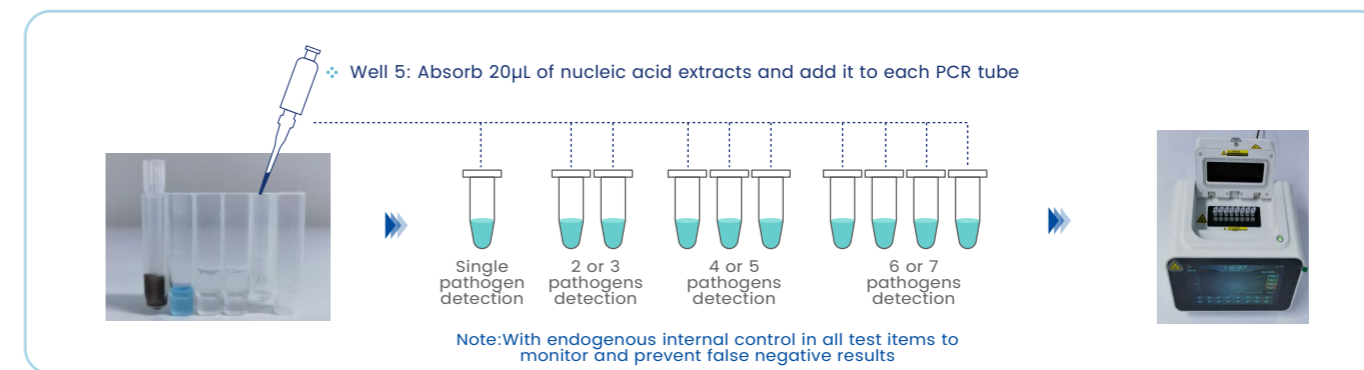
Step 2: Nucleic acid extraction

- 1) According to the number of test samples, take out the corresponding numbers of Pets Pathogens Nucleic Acid Extraction Reagent and place on the single kit docking (provided with extractor). Gently tear off the aluminum foil sealing film to avoid vibration and prevent liquid splash.
- 2) Use a pipettor to absorb 400μL prepared liquid sample and add to the second well of the extraction reagent, and then put the magnetic rod sleeve into the first well.
- 3) Open the GeneFlex Nucleic Acid Extractor, click the "Out" button, put the extraction reagent with the single kit docking into the instrument, and then click the "Run" button. Click "Yes" to start the nucleic acid extraction program after the magnetic rod sleeve self-check is correct.



Step 3: PCR detection

- 1) After nucleic acid extraction, open the Pets Pathogens PCR Detection Reagent tubes and use the pipettor to add 20μL extracted pathogens nucleic acids to each tube from the fifth well of the extraction reagent. Close the lids and thoroughly vibrate the tubes for fully remelting and mixing the freeze-dried powder. Then centrifuge the liquid to the bottom of the tube while avoiding bubbles present.
- 2) Place the PCR reagent tubes on the reaction hole of the Gentier mini Portable Real Time PCR System, and then close the cover plate of the instrument. Select the corresponding pet pathogen detection project, set the detection hole position and sample information, and then click the "Run" button to start the fluorescence PCR detection program.



- 3) After PCR detection, the instrument automatically displays the negative or positive result, Ct value and fluorescence amplification curve of each tested item. The test report can be printed after completing sample information in Tianlong report management system on computer.

