PARAMETERS

Model	Panall 8000
Sample Throughput	1~8 samples at the same time
Pipetting Range	20μL ~250μL
Detection time	1~2 hours, relying on the reagent
Channel and Available Fluorescein	Channel 1: FAM, SYBR Green I, etc. Channel 2: VIC, HEX, TET, JOE, etc. Channel 3: ROX, Texas Red, etc. Channel 4: Cy5, etc.
Pipetting Performance	20μL ≤ V<40μL: accuracy: A≤5.0%, repeatability: CV≤3.0% 40μL ≤ V<100μL: accuracy: A≤3.0%, repeatability: CV≤1.5% V ≥100μL: accuracy: A≤1.0%, repeatability: CV≤1.0%
Extraction Heating Rate	Average heating rate: ≥ 1.5℃/s;
Extraction Temperature Accuracy	≤ 1.0℃
PCR Heating Rate	Average heating rate: ≥ 4.5℃/s Maximum heating rate: ≥ 6.1℃/s
PCR Cooling Rate	Average cooling rate: ≥ 3.5℃/s; Maximum cooling rate: ≥ 5.0℃/s.
PCR Temperature Accuracy	≤ 0.1℃
Sample Testing Linearity and Repeatability	Linear correlation: /r/ ≥ 0.998 Repeatability: CV≤ 1.5%
Information Management	Sample information: with scanner inside, Panall 8000 can scan and record the sample information; Reagent information: visual system can automatically identify the kit information and run the corresponding program
Minimized Contamination	Directional exhaust & negative pressure system; HEPA filtration; UV disinfection; Shortest fixed path for sample operation
Data Storage	1000 experiment files can be stored
Language	Chinese and English
Power Supply and Power Consumption	AC 100~240V, 50/60Hz; 1200VA
Communication Specification	Internet Port: TCP/IP protocol, Ethernet connection USB Port: USB 2.0
Dimension	750mm(L) × 350mm(W) × 600mm(H)
Weight	80Kg

Panall 8000
All-in-one Molecular Diagnosis System

Embrace flexibility with **open system** to create broad molecular test menu

Open system to bring more possibilities

Sample in-result out system

One key operation and walkaway workflow

open system

12.1" 12.1-inch intuitive touch screen

No interpretation of results needed

8 samples can be tested at the same time

No extra equipment needed

Closed system minimizes contamination

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Address: No. 4266 Shanglin Road, Xi'an, China

Tianlong Panall 8000 All-in-one Molecular Diagnosis System is a simple and secure molecular diagnosis system that integrates the functions of sample tube decapping/capping, sample loading, nucleic acid extraction, PCR setup, PCR detection and result analysis, which can realize a true sample in -result out detection process and bring great convenience for professionals with only one-key operation.

Panall 8000 is designed as an open platform that is compatible with molecular diagnostic tests from different manufacturers. Tianlong intends to collaborate with best-in-class IVD assay developers to bring new tests to the Panall 8000 All-in-one Molecular Diagnosis System for a broad range of disease categories.
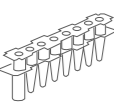
COMPATIBLE CONSUMABLES

Specialized sample tube

Specialized nucleic acid extraction kit

*Tianlong can customize nucleic acid extraction reagents to match your PCR detection needs

Specialized nucleic acid detection kit

*Open system for PCR protocol and compatible with PCR reagents from different manufactures

Sample in -result out system

TEST PORTFOLIO

Tianlong offers an extensive menu of tests on the system covering respiratory infections, sexually transmitted infections, encephalitis/meningitis infections, and gastrointestinal infections. Tianlong also offers customized reagents for the Panall 8000 All-in-one Molecular Diagnosis System that enables labs to program user-defined PCR analysis protocols and streamline their PCR tests.

Respiratory Infections

Sexually Transmitted Infections

Bloodborne Infections

Expand Testing Menu

Gastrointestinal Infections

Encephalitis/Meningitis Infections

Customized reagents
(open system for PCR protocol)

OPEN SYSTEM

Tianlong Panall 8000 is an open system that enables laboratories to program user-defined PCR analysis protocols. Laboratories can use user-defined protocols in addition to those developed by Tianlong. The simple and efficient design of the Tianlong Panall 8000 allows you to test a wide range of sample types and meet emerging diagnostic requirements through customized reagents. Tianlong intends to work with our partners to bring more new tests to the Panall 8000 for detection of a broad range of disease categories.

Compatible with PCR reagents from different manufactures
Empty PCR tubes work with your PCR reagents

Tianlong specialized consumable

Features

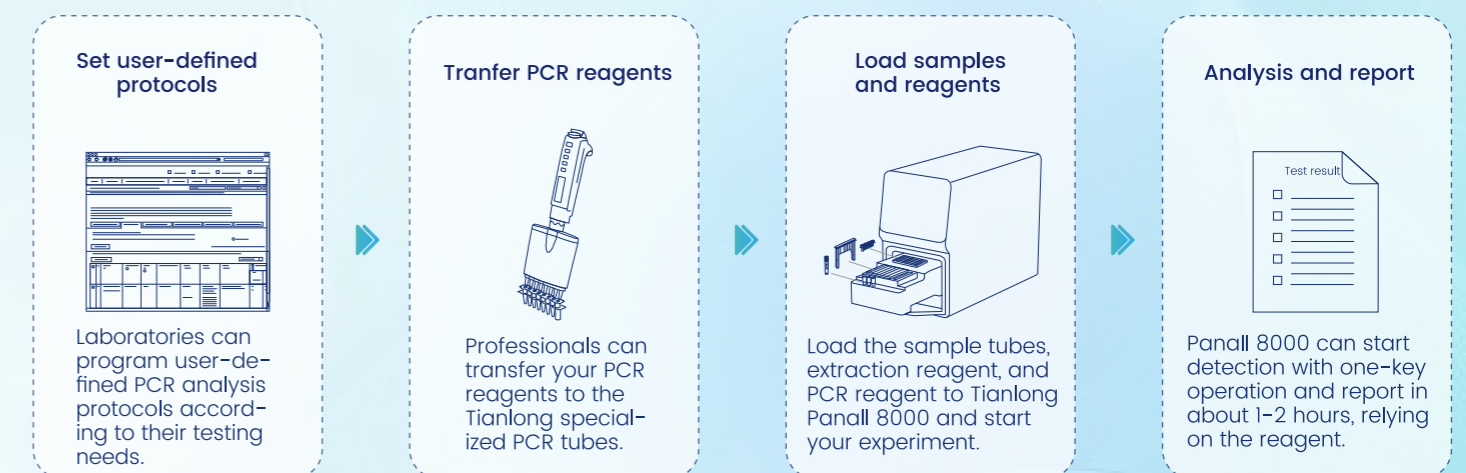**Customize collaboration mode for a more diversified menu**
Tianlong will collaborate with our partners to jointly expand the testing menu. Tianlong can customize nucleic acid extraction reagents to match your PCR reagents for more business possibilities.

Available for more application scenarios
An open system with a diversified testing menu can meet your emerging diagnostic requirements and apply in more scenarios. Tianlong Panall 8000 compatible with your reagents can optimize the detection process with minimal hands-on time and make detection more efficient.

The open system workflow on Tianlong Panall 8000

Set user-defined protocols

Laboratories can program user-defined PCR analysis protocols according to their testing needs.

Tranfer PCR reagents

Professionals can transfer your PCR reagents to the Tianlong specialized PCR tubes.

Load samples and reagents

Load the sample tubes, extraction reagent, and PCR reagent to Tianlong Panall 8000 and start your experiment.

Analysis and report

Panall 8000 can start detection with one-key operation and report in about 1-2 hours, relying on the reagent.

APPLICATION AREA

Health Clinic

Hospital Emergency and Outpatient Department

CDC

Research Institute

APPLICATION CASE

Bloodborne pathogen detection reagents from KHB on Tianlong panall 8000

Detection of top 3 bloodborne pathogens: HBV, HCV, HIV（Type1+2）

High sensitivity and high specificity

Wide subtypes coverage

Testing item	Product Name	Target Pathogen
Bloodborne Infections	KHB Nucleic Acid Testing Kit for HBV DNA, HCV RNA and HIV RNA（Type 1+2）	HBV, HCV, HIV（Type 1+2）
	KHB Nucleic Acid Testing Kit for HBV DNA	HBV
	KHB Nucleic Acid Testing Kit for HCV RNA	HCV
	KHB Nucleic Acid Testing Kit for HIV RNA（Type 1）	HIV（Type 1）

Kit Specifications

Product Name	KHB Nucleic Acid Testing Kit for HBV DNA, HCV RNA and HIV RNA（Type 1+2）（Real-time PCR）	KHB Nucleic Acid Testing Kit for HBV DNA （Real-time PCR）	KHB Nucleic Acid Testing Kit for HCV RNA Real-time PCR）	KHB Nucleic Acid Testing Kit for HIV RNA（Type 1）（Real-time PCR）
Specimen	Serum/plasma			
Analysis Method	Qualitative	Quantitive	Quantitive	Quantitive
LoD	HBV: 2.5 IU/mL HCV: 9 IU/mL HIV-1: 20 IU/mL HIV-2: 40 IU/mL	5 IU/mL	12.5 IU/mL	20 IU/mL
Precision	CV≤5%	CV≤5%	CV≤5%	CV≤5%
Storage & Validity	-20℃±5℃ for 12 months			
Cat.No	−	−	−	−
Specification	96T/Kit	96T/Kit 32T/Kit	96T/Kit 32T/Kit	96T/Kit 32T/Kit
Compatible Extraction Kit	T552H-Tianlong Nucleic Acid Extraction Kit （For blood screening）	T562H-Tianlong Nucleic Acid Extraction Kit（For HIV/HBV/HCV）		

ATTACHED FILE

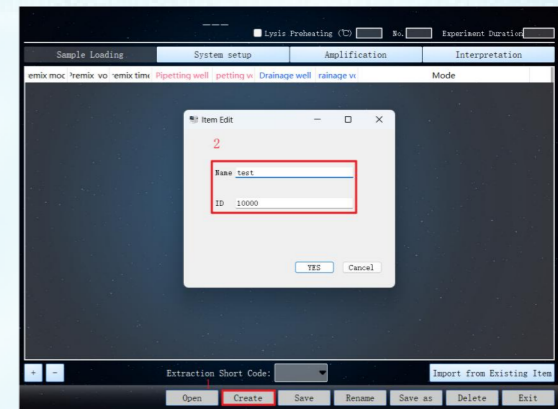## SOP for setting your PCR protocol in panall 8000 open system

1 Start setting

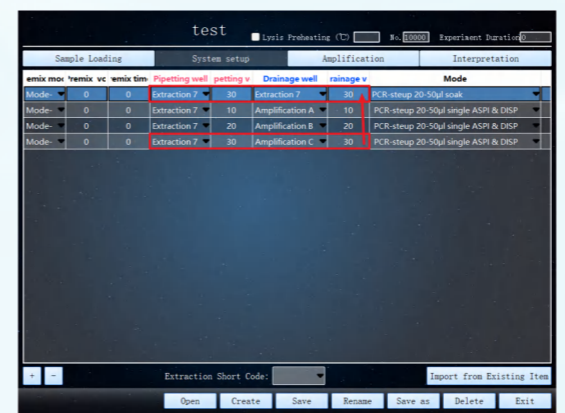Login in superadmin mode. Choose in turn Setting＞Item Management＞Item Edit

2 Set new experiment

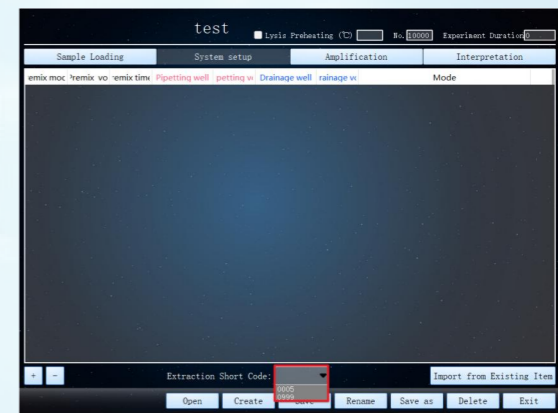Edit the new experiment name and ID

3 Sample loading and PCR system setup

Choose sample loading, mixing and dispensing mode and set parameters
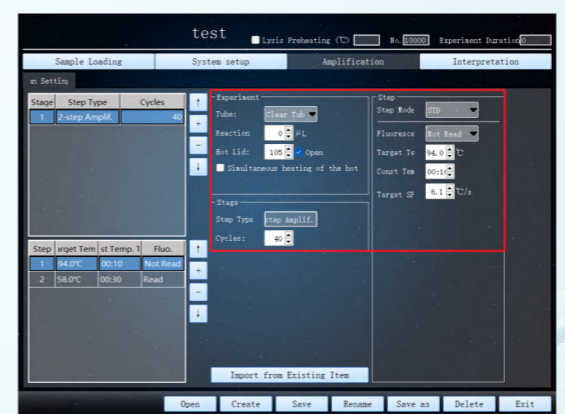

4 Choose extraction protocol

Choose the extraction reagent protocol according to your detection needs

5 Set PCR protocol

Choose the amplification method and set the amplification cycles and steps

6 Set target gene and internal control

Result analysis by independent gene interpretation or Joint gene interpretation

*After PCR protocol set up, user can save the protocol as an template, and start your new experiment quickly with pre-configured templates.