

Introduction to TOROIVD and animal disease detection products

TOROIVD TECHNOLOGY COMPANY LIMITED

2024 Version 1.0

About TOROIVD



Company Headquarter and R&D Center in Shanghai **ISO 9001 Certified**



Manufacture Center in Jiangsu **ISO 13485 Certified, 2700 m²**

At TOROIVD, we are committed to the evolution of enzymes and the innovation of in vitro diagnostics (IVD).

Our journey began in Shanghai in 2005, where we initially served as a distributor of PCR and qPCR reagents. Since 2018, our focus has shifted to the development and manufacturing of qPCR raw materials, qPCR premixes, and pioneering fast detection products for a diverse clientele that includes scientists, IVD reagent manufacturers, farmhands, and veterinarians.

3“A” for Animal Disease Detection

Accurate

Accessible

Affordable

Accurate

	ELISA / Antigen Method	qPCR Method
Pathogen copy number needed for each test	Over 10000 copies.	50 – 100 copies.
Golden standard for pathogen detection	No.	Yes.
Early warning ability	Poor.	Strong.

Accessible

	ELISA / Antigen Method	qPCR Method
Easy to use	Yes.	No.
Facility requirement	No.	Yes. Over 200,000 USD, far away from the farm.
Professionals requirement	No.	Yes.
Additional equipment requirement	ELISA needs a reader, while Antigen needs eye.	Yes. Over 50,000 USD.

Affordable

	ELISA / Antigen Method	qPCR Method
Price for each test	15 - 25 USD	Over 25 USD
Time for waiting the result	15 – 60 min	Two or more days

The **Innovation** from TOROIVD

One package contains 4 modules for **on-site** pathogen detection.



1. Sampling Tubes



2. Reaction Mix



3. Test Tubes



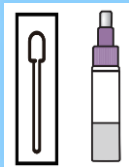
4. Test Device



Portable design

Easy to Use (3 steps for testing)

Step 1. Sampling

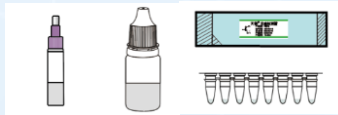


A fresh sampling tube with swab

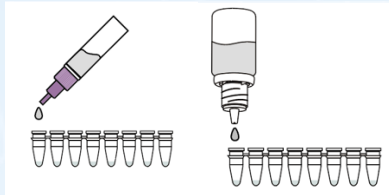


Take the sample.

Step 2. Reagents preparing

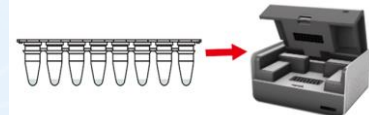


- Sampling tube containing swab sample
- Reaction mix
- Test tubes

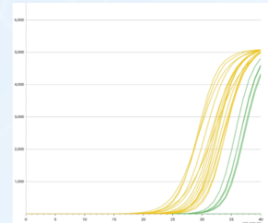


One drop from the sampling tube followed by another drop from the reaction mix.
Just like antigen operation.

Step 3. Testing



- Test tubes containing sample and reaction mix
- Test device



Put the test tubes into the test device, choose the general program and click "start".
Results come out one hour later.

Ultra Sensitive



检测报告编号: 2022H16-30-3890616001
Test report serial No.



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中国上海测试中心

NATIONAL CENTER OF TESTING TECHNOLOGY, SHANGHAI

检测报告

Test Report

委托者
Customer

天罗诊断科技江苏有限公司

联络信息
Contact information

江苏省如东县珠江路888号生命健康产业园20号楼

样品名称
Name of sample

新型冠状病毒2019-nCoV核酸检测试剂盒(荧光PCR法)

制造厂
Manufacturer

天罗诊断科技江苏有限公司

型号/规格
Model/Specification

八联型(5混1), 40人份/盒

样品编号
No. of sample

TL-SA-202240 (20220428)

三、检出限检测结果

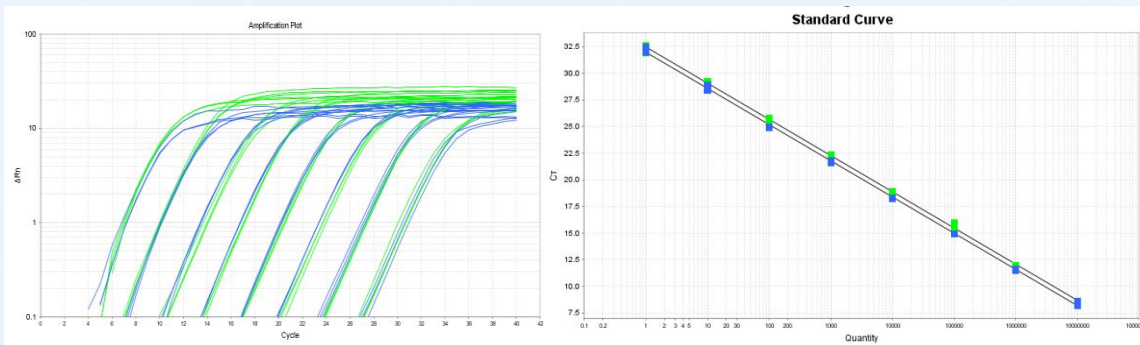
委托要求	检验结果
检出限不高于 200copies/mL	N基因: 阳性检出率 95.8% (n=24) (核酸模板浓度为 200 copies/mL)

As shown in the report, virus concentration as low as 200 copies/mL can be detected by TOROIVD reagents. The virus number in the 25 μ L sample added into the test tube is 5. In theory, only **5 copies** of pathogen is needed for each test.

NATIONAL CENTER OF TESTING TECHNOLOGY, SHANGHAI

*Test Report from China National Center of Testing Technology

Heat Stable



- TOROIVD reagents exhibit stable bioactivity after incubation at 37 °C for one week. (Reagent kept at 37 °C in green line, reagent kept at 4 °C in blue line. Reagents performance remained almost in the same.)
- Reaction mix has been verified to be stable at room temperature for at least 6 months.
- Room temperature or blue-ice transportation friendly. Suitable for Southeast Asia Market.

Animal Disease Detection Products

In Summary

	ELISA / Antigen Method	qPCR Method	TOROIVD Method
Accurate and Sensitive	○	●	●
Early warning	○	●	●
Easy to Use	●	○	●
No additional device or professional requirement	ELISA ○ Antigen ●	○	●
Portable	ELISA ○ Antigen ●	○	●
Fast detection	ELISA ○ Antigen ●	○	●
Cost for each test	15 - 25 USD	Over 25 USD	13 -15 USD (*suggesting market price for end user)

Animal Disease Detection Products

Target Customers

Livestock & Poultry Farm



Feeds Seller



Veterinarian



Pet Clinic



Animal Disease Detection Products

TOROIVD® Gene Test Tube

Over 200 gene test tubes for different target pathogens detection have been successfully developed.

You can check the list from http://www.toroivd.com/page87?product_id=44 to find the test tube you interested.

[Listed items]

We offer a list with hundreds of designed sequences of primer-probe sets to test the target pathogen for animals, plants, and humans as follows.

[Swines Diseases List: about 45 of pathogens :](#)

[Ruminants Diseases List: about 46 of pathogens for bovines, sheep and goats;](#)

[Poultry Diseases List: about 57 of pathogens for chickens, ducks and geese;](#)

[Crustaceans Diseases List: about 9 of pathogens for shrimps;](#)

[Pets Diseases List: about 48 of pathogens for dogs and cats;](#)

You can ask for free samples of the test tubes with your interest sequence of the target pathogen. When our listed sequences cannot meet your needs, you can offer own designed sequence to get a customized test tube, and each sequence would be named one sequence number(S/N).

For those pathogens have not been listed, you can provide the selected sequence for the pathogen to get a customized gene test tube.

Thank You

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