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Product Catalogue

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# About Daan

Daan Gene Co., Ltd. is a high-tech biomedical enterprise committed to the R&D, manufacturing and marketing of IVD products relating to disease diagnosis and human health.

Founded in 1993 and headquartered in Guangzhou, China, Daan Gene ranks among China’s leading molecular diagnosis companies with its expertise in many core businesses. Apart from developing new diagnostic tests, automatic extractors and real-time PCR systems, its objectives also include producing core raw material, CRMs and setting up service labs to perform clinical analyses for hospitals and individuals.

Today, Daan Gene's innovative molecular diagnostic solutions have helped millions of patients globally. Besides molecular diagnostic technology, the company is also committed to immunological diagnostic technology, biochemical technology, POCT technologies, etc. The products involve infectious disease detection, TORCH, precision medicine, blood screening, public health and scientific research services. Multiple product lines are deployed by Daan Gene, making a comprehensive layout in the IVD industry.



Originated from Sun Yat-sen University, with **30+** years of experience in the molecular diagnosis industry.



**100%** tender winner for 2019-nCoV PCR kits in domestic 19 provinces.



The 1<sup>st</sup> company in China to obtain **CE List A** approval for **HBV/HCV** PCR kit.



WHO, World Bank Group, Global Fund, UNICEF, Consulates General of PCR strategy partner.

# Contents

A

Real-time PCR Detection Kit

2019 Novel coronavirus (2019-nCoV)

Hepatitis Virus

Human Papilloma Virus

Sexully Transmitted Infections

Respiratory Pathogens

Digestive Pathogens

Public Health

Tomor Markers

Human Immunodeficiency Virus

Blood Screening

TORCH

Pharmacogenomics

01

09

12

14

18

20

21

26

27

27

28

28

B

VTM

Specimen Preservation Reagent

Specimen Preservation Solution

29

C

Nucleic Acid Extraction Kit

30

D

Instrument

32

E

Mobile and Assembled Laboratory

Mobile PCR Laboratory

Laboratory achievements

34

35



# Real-time PCR Detection Kit

# Real-time PCR Detection Kit

## Hepatitis Virus

### Background

Hepatitis B and C are viral infections that attack the liver and can cause both acute and chronic hepatitis, ranging in severity from a mild illness to a serious, lifelong illness including liver cirrhosis and cancer. Hepatitis B and C can also be transmitted through unsafe injections, sexual contact and sharing equipment for injecting drug use, etc. WHO estimates that 354 million people worldwide live with hepatitis B or C, with about 3 million new infections occurring per year. A global hepatitis strategy has been set by WHO aiming to reduce new hepatitis infections by 90% and deaths by 65% between 2016 and 2030.



### HBV/HCV Diagnostic Kits

Daan's Hepatitis Viruses Diagnostic Kits are intended for the quantitative detection of HBV/HCV nucleic acids in human serum or plasma specimens. These kits are based on the real-time fluorescent PCR technique and design specific primers and fluorescence probes that take relatively conserved regions in the viruses' genomes as target regions. These kits have wide linear range and high sensitivity. In addition, internal control is involved to monitor the whole NAT procedure.

### Product Information

Product Description	Specimen
Diagnostic Kit for Quantification of Hepatitis B Virus DNA (PCR-Fluorescence Probing)	Serum or plasma
Diagnostic Kit for Quantification of Hepatitis C Virus RNA (PCR-Fluorescence Probing)	Serum or plasma

## Diagnostic Kit for Quantification of Hepatitis B Virus DNA (PCR-Fluorescence Probing)

Diagnostic Kit for Quantification of Hepatitis B Virus DNA (PCR-Fluorescence Probing) is intended for the quantitative detection of HBV DNA in human serum or plasma specimens. This kit is based on the real-time fluorescent PCR technique and designs specific primers and fluorescence probes that take relatively conserved regions in the HBV genome as target regions.



### Specification

Test Principle	Quantitative real-time fluorescent PCR
Specimen type	Serum or plasma
Fluorescence channel	FAM, VIC
LOD	10 IU/mL
linear range	20 IU/mL-1.0×10 <sup>9</sup> IU/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI Prism 7500
Certificate	CE, NMPA, FSC

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Diagnostic Kit for Quantification of Hepatitis B Virus DNA (PCR-Fluorescence Probing)	DA0041	Large package, 48 tests/kit

# Real-time PCR Detection Kit

## Diagnostic Kit for Quantification of Hepatitis C Virus RNA (PCR-Fluorescence Probing)

Diagnostic Kit for Quantification of Hepatitis C Virus RNA (PCR-Fluorescence Probing) is intended for the quantitative detection of hepatitis C virus (HCV) RNA in human serum or plasma specimens. This kit is based on the real-time fluorescent PCR technique and designs specific primers and fluorescence probes that take relatively conserved regions in the HCV genome as target regions.



### Specification

Test Principle	Quantitative real-time fluorescent PCR
Specimen type	Serum or plasma
Fluorescence channel	FAM, VIC
LOD	20 IU/mL
linear range	50 IU/mL-1.0×10 <sup>8</sup> IU/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI Prism 7500
Certificate	CE, NMPA, FSC

### Order Information

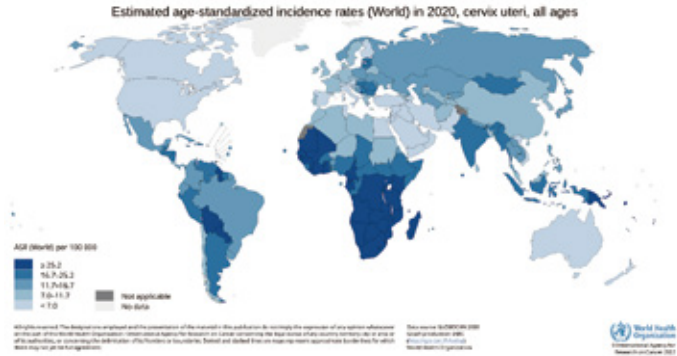
Description	Cat. No.	Specification(Tests/Kit)
Diagnostic Kit for Quantification of Hepatitis C Virus DNA (PCR-Fluorescence Probing)	DA0182	Large package, 48 tests/kit

## Human Papilloma Virus

### Background

Human papillomavirus (HPV) is the most common viral infection of the reproductive tract and is mainly transmitted through sexual contact. There are more than 100 types of HPV, of which 14 types are cancer-causing (also known as high-risk types). Two of these, HPV 16/18 are responsible for at least 70% of cervical cancers and 50% of high-grade cervical pre-cancers.

Cervical cancer is the fourth most common cancer among women globally. To reach the 2030 targets of cervical cancer elimination, WHO encourages countries to use HPV tests for cervical screening.



Source: World Health Organization<sup>®</sup> & CDC<sup>®</sup>  
Reference: <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>  
[https://www.cdc.gov/cancer/cervical/basic\\_info/](https://www.cdc.gov/cancer/cervical/basic_info/)  
<https://gco.iarc.fr/today/online-analysis-map>

### HPV (16/18 genotypes) DNA Test (Real-Time PCR)

Daan's HPV (16/18 genotypes) DNA Test (Real-Time PCR) is used to qualitatively detect HPV type 16 and 18 DNA in cervical exfoliated cells and genitourinary secretions specimens. This kit uses the HPV genome L1 variant region as the target area, and designs HPV type 16/18 specific primer-probe combination (FAM label) and internal reference primer-probe (HEX label), with hot-start DNA polymeraseand other components.

### Product Information

Product Description	Specimen
HPV (16/18 genotypes) DNA Test (Real-Time PCR)	Cervical exfoliated cells, genitourinary secretions



# Real-time PCR Detection Kit

## HPV (16/18 genotypes) DNA Test (Real-Time PCR)

This kit is used to qualitatively detect human papillomavirus (HPV) type 16 and type 18 deoxyribonucleic acid (DNA) in cervical exfoliated cells and genitourinary secretions specimens.



### Specification

Test principle	Qualitative real-time fluorescent PCR
Specimen type	Cervical exfoliated cells, genitourinary secretions
Specimen extraction method	Spin column (recommended)
Fluorescence channel	FAM (HPV16/18 gene detection); VIC/HEX (Internal reference gene detection)
LOD	1.0E+04 copies/reaction
Storage and shelf life	Nucleic acid extraction reagent: 18–25°C, 9 months
	Nucleic acid amplification reagent: -20±5°C, 9 months
	Proteinase K and Carrier RNA: -20±5°C, 9 months
Applicable Instruments	ABI Prism 7500, ABI Prism 7300, LightCycler 480
Certificate	NMPA, FSC, CE

### Order Information

Description	Cat. No	Specification (Tests/Kit)
HPV(16/18 genotypes) DNA Test (Real-Time PCR)	DA0540	Large package, 48 tests/kit

# Real-time PCR Detection Kit

## Sexully Transmitted Infections

### Background

Sexually transmitted infections (STIs) are infections that are spread predominantly by sexual contact or from mother to child during pregnancy, childbirth, and breastfeeding. STIs have direct impact on sexual and reproductive health through stigmatization, infertility, cancers, and pregnancy complications and can increase the risk of HIV. There are more than 20 types of STIs, including Chlamydia *Chlamydia Trachomatis* (CT), Neisseria Gonorrheae (NG), HIV/AIDS, *Ureaplasma Urealyticum* (UU), HPV, Enterovirus, etc.

### STIs Diagnostic Kit

Daan’s STIs Diagnostic Kits are intended for the in vitro qualitative detection of CT/NG/UU nucleic acids in male urethral secretion swab and female cervical secretion swab specimens. These kits are based on the real-time fluorescent PCR technique and design specific primers and fluorescent probes to target the highly conserved coding region of viruses’ genes. Internal standard materials are involved in these kits to monitor the whole NAT procedure.

### Product Information

Product Description	Specimen
Detection Kit for <i>Chlamydia trachomatis</i> Nucleic Acid (PCR-Fluorescence Probing)	Male urethral secretion swab or female cervical secretion swab specimens
Detection Kit for Neisseria gonorrhoeae DNA (PCRFluorescence Probing)	Male urethral secretion swab or female cervical secretion swab specimens
Detection Kit for <i>Ureaplasma Urealyticum</i> Nucleic Acid (PCR-Fluorescence Probing)	Male urethral secretion swab or female cervical secretion swab specimens

# Real-time PCR Detection Kit

## Detection Kit for *Chlamydia trachomatis* Nucleic Acid (PCR-Fluorescence Probing)

This kit is intended for the *in vitro* qualitative detection of *Chlamydia trachomatis* (CT) DNA in male urethral secretion and female cervical secretion swab specimens. This kit uses real-time fluorescent PCR technology in which specific primers and fluorescent probes (FAM channel is CT detection result, VIC channel is internal standard detection result) are designed to target the conserved sequences of the cryptic plasmids of *Chlamydia trachomatis* (CT) for PCR amplification.



### Specification

Test principle	Qualitative real-time fluorescent PCR
Specimen type	Male urethral secretion swab and female cervical secretion swab specimens
Target gene	Conserved sequences of the cryptic plasmids of <i>Chlamydia trachomatis</i> (CT)
Fluorescence channel	FAM, VIC
LOD	400 copies/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI Prism 7500
Certificate	NMPA, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for <i>Chlamydia trachomatis</i> Nucleic Acid (PCR-Fluorescence Probing)	DA1140	Large package, 48 tests/kit
	DA1141	Large package, 20 tests/kit
	DA1142	Single tube, 20 tests/kit

# Real-time PCR Detection Kit

## Detection Kit for *Neisseria gonorrhoeae* DNA (PCR-Fluorescence Probing)

This kit is intended for the qualitative detection of *Neisseria gonorrhoeae* nucleic acid in male urethral secretion swabs and female cervical secretion swabs. The kit uses real-time fluorescent PCR technology, with specific primers and fluorescent probes designed to bind to the highly conserved region of NG gene coding regions as a target region for PCR amplification, and is used for the qualitative detection of NG DNA in specimens.



### Specification

Test principle	Qualitative real-time fluorescent PCR
Specimen type	Male urethral secretion swab, female cervical secretion swab
Target gene	Highly conserved region of NG gene coding regions
Fluorescence channel	FAM, VIC
LOD	0.748×10 <sup>3</sup> copies/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI 7500, Roche LightCycler480
Certificate	NMPA, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for <i>Neisseria gonorrhoeae</i> DNA (PCR-Fluorescence Probing)	DA1190	Large package, 48 tests/kit
	DA1191	Large package, 20 tests/kit
	DA1192	Single tube, 20 tests/kit

# Real-time PCR Detection Kit

## Detection Kit for *Ureaplasma Urealyticum* Nucleic Acid (PCR-Fluorescence Probing)

This kit is intended for the *in vitro* qualitative detection of *Ureaplasma Urealyticum* (UU) DNA in male urethral secretion and female cervical secretion swab specimens. This kit uses real-time fluorescent PCR technology to target the highly conserved coding region of *Ureaplasma Urealyticum* (UU) gene to design specific primers and fluorescent probes for PCR amplification and conduct rapid qualitative detection of *Ureaplasma Urealyticum* (UU) DNA in specimens.



### Specification

Test principle	Qualitative real-time fluorescent PCR
Specimen type	Male urethral secretion swab and female cervical secretion swab specimens
Target gene	Highly conserved coding region of Ureaplasma urealyticum (UU) gene
Fluorescence channel	FAM, VIC
LOD	6.62×10 <sup>2</sup> copies/mL (8.80×10 <sup>2</sup> CCU/mL)
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI 7500, Roche LightCycler480
Certificate	NMPA, FSC, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for Ureaplasma Urealyticum Nucleic Acid (PCR-Fluorescence Probing)	DA1120	Large package, 48 tests/kit
	DA1121	Large package, 20 tests/kit
	DA1122	Single tube, 20 tests/kit

# Real-time PCR Detection Kit

## Respiratory Infections

### Background

The common cold and even the flu that interfere with normal breathing are considered respiratory infections and are usually caused by pathogens that attack the respiratory tract. Respiratory infections are contagious and can spread from one person to another by transmitting germs from a cough or sneeze or even touching an object exposed to those germs.

Respiratory infections can lead to a variety of symptoms, including congestion, runny nose, cough, sore throat, body aches, fatigue, etc. Some could cause life-threatening like bacterial pneumonia or tuberculosis (TB).



### Respiratory Infections Diagnostic Kits

Daan's Respiratory Infections Diagnostic Kits are intended for the *in vitro* qualitative detection of several respiratory viruses' nucleic acids in swab specimens or sputum. These kits are based on the real-time fluorescent PCR technique and design specific primers and fluorescent probes to target the highly conserved coding region of viruses' genes. Internal standard materials are involved in these kits to monitor the whole NAT procedure.

### Product Information

Product Description	Specimen
Diagnostic Kit for Human Influenza Virus Subtype H1 RNA (PCR-Fluorescence Probing)	Oropharyngeal swabs
Diagnostic Kit for <i>Mycoplasma pneumoniae</i> DNA (PCR-Fluorescence Probing)	Oropharyngeal swabs or sputum
Detection Kit for <i>Mycobacterium Tuberculosis</i> Complex Nucleic Acid (PCR-Fluorescence Probing)	Sputum or bronchoalveolar lavage fluid

# Real-time PCR Detection Kit

## Detection Kit for *Mycobacterium Tuberculosis* Complex Nucleic Acid (PCR-Fluorescence Probing)

### Intended Use

This kit is used for *in vitro* qualitative detection of the nucleic acid of *mycobacterium tuberculosis* complex in human sputum and bronchoalveolar lavage fluid specimens. Qualitative detection of the nucleic acid of *mycobacterium tuberculosis* complex in human sputum and bronchoalveolar lavage.



### Specification

Test Principle	Real-time fluorescent PCR
Specimen type	Sputum or bronchoalveolar lavage fluid
Fluorescence channel	FAM (IS6110), VIC (internal control)
Detection type	<i>M. tuberculosis</i> (main causative agent), <i>M. bovis</i> , <i>M. africanum</i> , <i>M. microti</i>
Process time	About 95 minutes
CV	≤5%
LOD	1 bacterium/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	AGS4800, ABI 7500, LightCycler480
Certificate	CE

### Order Information

Description	Cat. No	Specification (Tests/Kit)
Detection Kit for <i>Mycobacterium Tuberculosis</i> Complex Nucleic Acid (PCR-Fluorescence Probing)	DA1240	Large package, 20 tests/kit
	DA1241	Large package, 48 tests/kit
	DA1242	Single tube, 20 tests/kit

# Real-time PCR Detection Kit

## Degestive Pathogen

### Background

Digestive pathogen is a general definition for a group of viruses including enterovirus and norovirus. These viruses are often found in the respiratory secretions and stools of infectors and affect millions of people worldwide each year.

HFMD is caused by enterovirus infection and has been a common epidemic among children, its main manifestations are ulcerative herpes of oral mucosa and vesicular rashes on extremities. The main pathogens of HFMD are CA16 and EV71, in recent years, CA6 and CA10 have become major causes of HFMD outbreaks worldwide.

Norovirus is one of the major pathogens responsible for acute and infectious diarrhea in adults and children in communities. It is usually spread by the fecal-oral route and results in about 685 million cases of disease and 200,000 deaths globally a year.



## Detection Kit for Children Fever and Rashes, Hand-Foot-and-Mouth disease

Daan’s Detection Kits for Children Fever and Rashes, Hand-Foot-and-Mouth disease are used for the *in vitro* detection of enterovirus in multi-type of specimens from HFMD patients or suspected patients by PCR fluorescence probing technology, and can be used to distinguish among Enterovirus 71 (EV71), Coxsackievirus A16 (CA16), Coxsackievirus A6 (CA6) and Coxsackievirus A10 (CA10).

## Detection Kit for Norovirus RNA

Daan’s Detection Kit for Norovirus RNA is intended for the qualitative detection of norovirus RNA in feces specimens from patients. Using real-time fluorescence PCR technology, this kit contains specific primers and fluorescent probes designed to target the highly conserved regions of gene coding regions of noroviruses GI, GII, and GIV.

### Product Information

Product Description	Specimen
Detection Kit for Enterovirus 71/Coxsackievirus A16/Enterovirus RNA (PCR-Fluorescence Probing)	Feces, throat swabs, anal swabs
Diagnostic Kit for Coxsackievirus A16 RNA (PCR-Fluorescence Probing)	Feces, oropharyngeal swabs, or herpes fluid
Diagnostic Kit for Enterovirus RNA (PCR-Fluorescence Probing)	Stool, oropharyngeal swabs, or herpes fluid
Diagnostic Kit for Coxsackievirus A6 RNA (PCR-Fluorescence Probing)	Human throat swabs
Detection Kit for Norovirus RNA (PCR-Fluorescence Probing)	Feces



# Real-time PCR Detection Kit

# Real-time PCR Detection Kit

## Public Health

### Background

Public health is the public utilities related to a country or a region of the people's health. It contains the prevention, monitoring, and treatment of serious diseases, especially infectious diseases. Accurate, reliable, and high-throughput diagnostic solutions are vital to helping individuals, societies, and healthcare combat public health emergency events. Daan Gene has always been at the forefront with its efforts in the prevention and control of new and sudden outbreaks of infectious diseases, such as Dengue virus, Zika virus, and Monkeypox.



### Detection Kits for diseases of public health significance

Daan’s detection kits for diseases of public health significance are intended for the *in vitro* detection of infectious disease pathogens’ nucleic acids in different types of specimens. These kits are based on the real-time fluorescent PCR technique and design specific primers and fluorescent probes to target the highly conserved coding regions of the viruses. Internal standard materials are involved to monitor the whole NAT procedure.

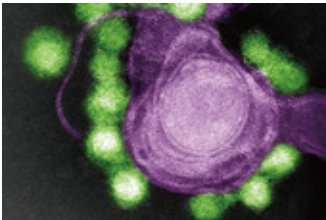
### Product Information

Product Description	Specimen
Detection Kit for Zika Virus RNA (PCR-Fluorescence Probing)	Serum, plasma, saliva, or urine
Diagnostic Kit for Dengue Virus RNA (PCR-Fluorescence Probing)	Serum
Detection Kit for Monkeypox Virus DNA (PCR-Fluorescence Probing)	Rashes, scabs, vesicle fluid, pustule fluid, or whole blood specimens
Detection Kit for Severe Fever with Thrombocytopenia Syndrome Bunyavirus (PCR-Fluorescence Probing)	Serum

## Detection Kit for Zika Virus RNA (PCR-Fluorescence Probing)



The product is intended for qualitative detection of the specific fragment of NS1 gene of Asian and African lineage Zika viruses in serum, plasma, saliva, and urine specimens from individuals with an epidemiological history and symptoms including fever, rash, arthralgia, or conjunctivitis that are difficult to explain by other reasons.



Reference: SHERBROOKE CONNECTIVITY IMAGING LAB/SCIENCE PHOTO LIBRARY

### Specifications

Test Principle	Real-time fluorescent PCR
Specimen type	Serum, plasma, saliva, urine
Fluorescence channel	FAM, VIC
LOD	50 copies/mL
Storage and shelf life	-20±5°C, 12 months
Applicable Instruments	ABI 7300, ABI 7500, LightCycler480
Certificate	NMPA, FSC, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for Zika Virus RNA (PCR-Fluorescence Probing)	DA0710	Large package, 24 tests/kit
	DA0711	Large package, 48 tests/kit

## Diagnostic Kit for Dengue Virus RNA (PCR-Fluorescence Probing)

The kit is used for the qualitative detection of Dengue virus (DV) RNA (including four serotypes: I, II, III, IV) in human serum specimen. The kit uses real-time fluorescent PCR technology, takes the high conservative region of the DV gene coding region as the target region, to design specific primers and fluorescent probes, and performs PCR amplification for qualitative detection of DV RNA in the specimen.

### Specifications

Test Principle	Real-time fluorescent PCR
Specimen type	Serum
Fluorescence channel	FAM, VIC
LOD	1.5×10 <sup>1</sup> TCID <sub>50</sub> /mL
Storage and shelf life	-20±5°C, 12 months
Applicable Instruments	ABI 7500, Roche LightCycler480
Certificate	NMPA, FSC, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Diagnostic Kit for Dengue Virus RNA (PCR-Fluorescence Probing)	DA0310	Large package, 10 tests/kit
	DA0311	Large package, 48 tests/kit
	DA0312	Single tube, 10 tests/kit

## Detection Kit for Monkeypox Virus DNA (PCR-Fluorescence Probing)

The product is intended for qualitative detection of the Monkeypox virus DNA. The kit uses real-time fluorescent PCR technology for the detection of the Monkeypox virus DNA in patients’ rashes, scabs, blister fluid, pustular fluid, and whole blood specimens. It is both rapid and sensitive and accurate, and providing an accurate theoretical basis for clinical treatment.

### Specifications

Test Principle	Real-time fluorescent PCR
Specimen type	Rashes, scabs, vesicle fluid, pustular fluid, or whole blood specimens
Fluorescence channel	FAM: Monkeypox conservative region, VIC: endogenous internal control
LOD	200 copies/mL
Storage and shelf life	-20±5°C, 12 months
Applicable Instruments	ABI 7500, Roche LightCycler480, AGS4800, AGS8830
Certificate	CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for Monkeypox Virus DNA (PCR-Fluorescence Probing)	DA1430	Large package, 24 tests/kit
	DA1431	Large package, 48 tests/kit

# Real-time PCR Detection Kit

## Detection Kit for Severe Fever with Thrombocytopenia Syndrome Bunyavirus (PCR-Fluorescence Probing)



This kit is used for *in vitro* quantitative detection of severe fever with thrombocytopenia syndrome bunyavirus RNA in serum specimen. This kit is suitable for supplementary diagnosis of severe fever with thrombocytopenia syndrome bunyavirus infection.



### Specifications

Test Principle	Real-time fluorescent PCR
Specimen type	Serum
Fluorescence channel	FAM, VIC
LOD	10 TCID <sub>50</sub> /mL
Linear range	1.0×10 <sup>2</sup> TCID <sub>50</sub> /mL ~ 1.0×10 <sup>6</sup> TCID <sub>50</sub> /mL
Storage and shelf life	-20±5°C, 6 months
Applicable Instruments	ABI 7500, ABI 7300, LightCycler480, BioRad CFX-96
Certificate	NMPA, CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for Severe Fever with Thrombocytopenia Syndrome Bunyavirus (PCR-Fluorescence Probing)	DA0340	Large package, 48 tests/kit

## Tumor Markers

### Background

Tumor markers, also called biomarkers, are substances found in your blood, urine, or body tissue. They may refer to proteins that are made by both healthy cells and cancer cells in the body and may also refer to mutations, changes, or patterns in a tumor's DNA. They are used in oncology to help detect the presence of cancer. PCR can detect tumor marker-expressing cells that are otherwise undetectable by other means in patients with localized or metastatic cancer.



## Detection Kit for Epstein-Barr Virus Nucleic Acid (PCR-Fluorescence Probing)



This kit is intended for the quantitative detection of Epstein-Barr virus (EBV) DNA. This kit is based on the real-time PCR technique and designs specific primers and fluorescent probes to target the highly conserved coding region of EBV gene. Internal standard materials are involved to monitor the whole NAT procedure and reduce the occurrence of false-negative results.



### Specifications

Test Principle	Quantitative real-time fluorescent PCR
Specimen type	Human serum, plasma, or whole blood specimens
Fluorescence channel	FAM (EBNA1 gene), VIC (Exogenous internal control)
LOD	1.0×10 <sup>2</sup> IU/mL (equivalent to 2.68×10 <sup>2</sup> copies/mL)
Linear range	2.0×10 <sup>2</sup> IU/mL - 2.0×10 <sup>8</sup> IU/mL
Storage and shelf life	-20±5°C, 9 months
Applicable Instruments	ABI 7500, Roche LightCycler480, AGS4800
Certificate	CE

### Order Information

Description	Cat. No.	Specification(Tests/Kit)
Detection Kit for Epstein-Barr Virus Nucleic Acid (PCR-Fluorescence Probing)	DA1250	Large package, 20 tests/kit
	DA1251	Large package, 48 tests/kit
	DA1252	Single tube, 20 tests/kit

# Real-time PCR Detection Kit

# Real-time PCR Detection Kit

## Human Immunodeficiency Virus

HIV, the virus that causes AIDS, is one of the world's most serious public health challenges. There were approximately 38 million people across the globe with HIV/AIDS in 2019. WHO estimates worldwide 37.7 million people living with HIV at the end of 2020, 680000 people died from HIV-related causes and 1.5 million people acquired HIV.



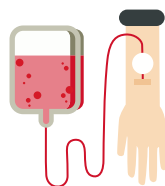
HIV-1 is the predominant strain of HIV in the world today. It is easier to transmit and more capable of causing rapid disease progression than HIV-2. Over 99% of HIV infections today are caused by HIV-1.

### Diagnostic Kit for Quantification of Human Immunodeficiency Virus Type 1 (HIV-1)

Daan designed HIV type 1 PCR Diagnostic kit for quantitative measurement of human immunodeficiency virus type 1 RNA content in human serum or plasma. This diagnostic test kit utilizes the reverse transcription-polymerase chain reaction (RT-PCR). It can be used to supervise the therapeutic effect of the auxiliary diagnosis for HIV-1 infection and the drug therapy of HIV-1 infected patients.

## Blood Screening

Blood transfusion is a life-saving intervention that has an essential role in patient management within health care systems, but many patients requiring transfusion do not have timely access to safe blood. WHO recommends that all blood donations should be screened for infections prior to use. Screening for HIV, hepatitis B and hepatitis C should be mandatory. According to the WHO report on blood safety (2018), 12 countries are not able to screen all donated blood for one or more of the above infections.



### Nucleic Acid Test Kit for HBV HCV HIV (Real-time PCR)

Daan designed this kit based on fluorescent PCR/RT-PCR amplification detection technology for the qualitative detection of hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus type 1 (HIV-1) nucleic acids in mixed/separated serum and plasma specimens.

## TORCH

TORCH infections are a group of congenital infections that are passed from mother to child at some time during pregnancy, during delivery, or after birth. TORCH is an acronym representing infections caused by Toxoplasma gondii, other agents, rubella, cytomegalovirus (CMV), and herpes simplex virus (HSV).



Daan's real-time PCR kits are used for detecting the nucleic acid of TORCH, which can help prevent complications in newborns by early detection of an infection.

## Pharmacogenomics

Pharmacogenomics is a field of research that studies how a person's genes affect how he or she responds to medications. Certain proteins affect how drugs work. Pharmacogenomics looks at variations in genes for these proteins. Such proteins include liver enzymes that chemically change drugs. Sometimes chemical changes can make the drugs more—or less—active in the body. Even small differences in the genes for these liver enzymes can have a big impact on a drug's safety or effectiveness. CYP2C19 metabolizes 5% of the prescription drugs in use today. Some of the commonly used and largest selling therapeutics for heart disease, depression, and fungal treatments are all metabolized by CYP2C19. Understanding a patient's CYP2C19 genotype may provide insight into how they will respond to drugs.



### CYP2C19 Metabolizer Phenotypes

*1/*1	Extensive metabolizers (EM)
*1/*2, *1/*3	Intermediate metabolizers (IM)
*2/*2, *2/*3, *3/*3	Poor metabolizers (PM)
*1/*17, *17/17	Ultra-rapid metabolizers (UM)

### CYP2C19 Genotyping Diagnostic Kit (PCR-Fluorescence Probing)

This kit is used to detect and identify the polymorphisms of CYP2C19\*2 (c. 681G>A), CYP2C19\*3 (c. 636G>A) and CYP2C19\*17 (c. -806C>T) in human whole blood samples. It is a qualitative genotyping assay which can be used as an aid to clinicians in determining therapeutic strategy for the therapeutics that are metabolized by the CYP2C19 gene product. The test results are for clinical reference only and cannot be used as a basis for confirming or excluding cases alone.



## Specimen Preservation Reagent (Virus inactivation )

This kit is used for the preservation of tissue and cytopathological analysis specimen.



### Order Information

Description	Cat. No	Specification (Tests/Kit)
Specimen Preservation Reagent	DA0970	1.5 mL/tube, 100 tubes/kit
	DA0971	3 mL/tube, 100 tubes/kit
	DA0972	5 mL/tube, 100 tubes/kit
	DA0973	6 mL/tube, 100 tubes/kit
	DA0974	10 mL/tube, 50 tubes/kit
	DA0975	500 mL/bottle, 1 bottle/kit

## Specimen Preservation Solution (No inactivating ingredients)

It is used for preservation of tissue and cytopathology analysis specimens.



### Order Information

Description	Cat. No	Specification (Tests/Kit)
Specimen Preservation Solution	DA0980	1 mL/ tube, 100 tubes/kit
	DA0981	3 mL/ tube, 100 tubes/kit
	DA0982	3 mL/ tube, 100 tubes/kit

## Nucleic Acid Extraction Kit (Magnetic Bead)

Magnetic bead is a simple and reliable method of purifying DNA/RNA. Under optimized conditions, DNA/RNA selectively binds to the surface of magnetic beads, while other contaminants stay in solution. After washing and elution, purified DNA/RNA can then be used directly in down-stream molecular biology applications.



### Features

- High sensitivity, wide linear range.
- High magnetic beads acquisition rate.
- Good repeatability.
- Wide range of application.

### Order Information

Description	Cat. No	Package	Compatible Instrument
Nucleic Acid Extraction Kit	DA0600	96 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0601	20 tests/kit (Pre-packaged)	Smart 32, Stream SP96
	DA0602	32 tests/kit (Pre-packaged)	Smart 32, Stream SP96
	DA0603	96 tests/kit (Pre-packaged)	Swift 96
	DA0604	480 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
Nucleic Acid Isolation or Purification Reagent	DA0621	96 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0623	32 tests/kit (Pre-packaged)	Smart 32, Stream SP96
RNA/DNA Purification Kit (Magnetic Bead)	DA0630	20 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0631	96 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0632	20 tests/kit (Pre-packaged)	Smart 32, Stream SP96
	DA0633	32 tests/kit (Pre-packaged)	Smart 32, Stream SP96
RNA/DNA Extraction or Purification Kit	DA0640	20 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0641	96 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA0642	20 tests/kit (Pre-packaged)	Smart 32, Stream SP96
Nucleic Acid Extraction Kit	DA0643	32 tests/kit (Pre-packaged)	Smart 32, Stream SP96
	DA1000	96 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96
	DA1001	20 tests/kit (Pre-packaged)	Smart 32, Swift 96
	DA1002	32 tests/kit (Pre-packaged)	Smart 32, Stream SP96
	DA1003	96 tests/kit (Pre-packaged)	Swift 96
	DA1004	480 tests/kit (Large package)	Smart 32, Stream SP96, Swift 96

# Nucleic Acid Extraction Kit

## RNA/DNA Purification Kit (Spin Column)

CE

NMPA

FSC

Spin column-based nucleic acid purification is a solid phase extraction method to quickly purify nucleic acids. This method relies on the fact that nucleic acid will bind to the solid phase of silica under certain conditions.

### Features

- Economical, no need extraction instruments.
- Extraction of high-quality DNA and RNA.
- Wide range of application.



### Order Information

Description	Cat. No	Package	Duration
RNA/DNA Purification Kit (Spin Column)	DA0590	20 tests/kit	30-120 min (1-48 samples)
	DA0591	48 tests/kit	

## RNA/DNA Purification Kit (Preservation)

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This kit is used for the collection and preservation of virus specimens. Combining the function of inactivation, lysis and nucleicacid extraction, it can handle the specimen from collecting to nucleic releasing in one process. The released DNA or RNA can be used directly as a PCR template for amplification.

### Features

- Sample collection, storage and nucleic acid extraction can be combined into one step.
- No need instrument, nucleic acid can be released directly, then can be used as PCR template.

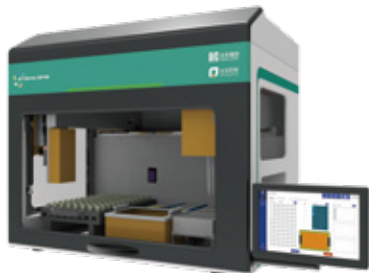


### Order Information

Description	Cat. No	Package	Duration
RNA/DNA Purification Kit (Preservation)	DA094X	400 µL/tube, 1/2/3/4/5/6/7/8 mL/tube,100 tubes/kit	5-10 min/sample

## Stream DP96

Sample Processing System (Model: DA8050)



- Automated sample transfer processing system.
- Independent dual-channel pipetting modules.
- Transfer 96 samples in 25 minutes.
- Integrate process: tube decapping, barcode scanning, sample transfer, reagent dispensing and tube recapping.
- Safe: High efficiency filtration system/UV light.
- Unique: Compatible with one-tube method/ Sample pooling mode.

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## Smart32

Nucleic Acid Extraction Instrument (Model: DA8030)



- Adopting magnetic bead technology.
- Extract and purify 32 samples in 18 minutes.\*
- Editable experiment procedure touch screen to control door-open or door-close.
- UV light to decontaminate.

\*Rapid Nucleic Acid Extraction Kit DA060X.

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## Stream SP96

Automatic Nucleic Acid Extraction Instrument (Model: DA8044)



- Fully-automatic nucleic acid extraction and PCR reaction preparation.
- High-throughput: 96 samples can be extracted in 18 minutes.\*
- High-precision liquid handing technology.
- Anti-contamination: HEPA filter system, 100% exhaust airflow circulation, UV disinfection.
- Flexible: 9 kinds of PCR reaction can be set up in one run.
- 2 extraction modules running individually.

\*Rapid Nucleic Acid Extraction Kit DA060X.

CE

NMPA

FSC

## Instrument

### Swift96

Automatic Nucleic Acid Extraction Instrument (Model: DA8045)



- High-throughput and automated nucleic extraction adopting magnetic bead technology.
- Extract and purify nucleic acid 1-96 samples in 16 minutes\*.
- Visualized interface, touch screen, editable program, easy to operate.
- Magnetic beads recovery rate ≥98%.
- Anti-contamination: exhaust airflow circulation, UV light.

\*Rapid Nucleic Acid Extraction Kit DA1003.



### AGS8830-8/AGS8830-16

Real-time PCR Detection System



- Fast: Get results in 35 minutes collocating with DA099X/DA107X.
- Throughput: 8 or 16 samples
- Accurate Temperature Control: Advanced semiconductor refrigeration technology.
- User-friendly: LCD screen/Humanized operation interface.
- Large Data Storage: Store more than 1000 files.
- Portable: 5.5 kg
- Result out-put: directly display on the screen or transfer by USB.



### AGS4800-48/96/144

Real-time PCR Detection System



- Bench-top professional instrument meets variable user requirements in life science and biology.
- High-throughput: 48, 96 or 144 samples
- Multi-fluorescence channels: 6 fixed and 2 customized channels.
- Automatic sample inlet and outlet as well as automatic hot lid.
- Wireless remote control and analysis.
- LIMS connectivity

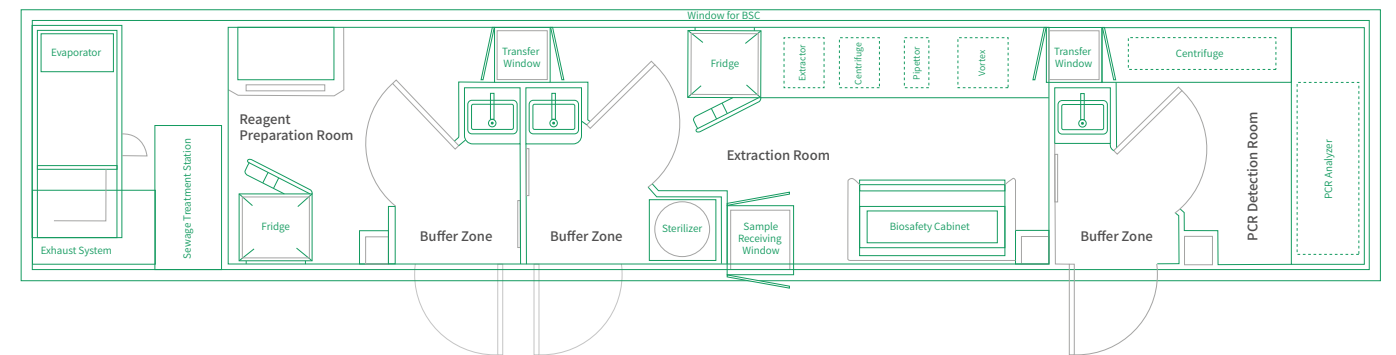


## Mobile and Assembled Laboratory

### Mobile PCR Laboratory

Combining innovation with state-of-the-art technology, Daan's mobile PCR laboratory is designed to deploy large-scale testing programs- whenever, wherever. It is composed of a reagent preparation room, an extraction room, a PCR detection room, a decontaminating room, and an electrical and mechanical room. From sample collection to interpretation of results, it offers a streamlined and automated workflow based on Daan's one-stop detection solution, which can conduct up to 10,000 tests per day when fully utilized.

Daan's mobile PCR laboratory plays a key role in detecting COVID-19 to support high throughput as well as fast testing depending on customer requirements. Daan will continue to deploy diagnostic knowledge, medical expertise, and passion for creating solutions for patients around the world.



### Laboratory-on-wheels

- A mobile laboratory to carry out COVID-19 analyses efficiently and flexibly.
- A ready-to-use solution to immediately deploy large-scale testing programs.
- The cost is much less than the reconstruction of the existing building.
- End-to-end process design, including delivery of all needed consumables, kits and instruments, onsite-support and maintenance.
- Designed in strict accordance with the BSL-2 laboratory and PCR detection standards.
- Anti-pollution design: sewage treatment station, exhaust system, Class 2 bio-safety cabinet and negative pressure room.
- Can be customized to specific needs at every site.
- A unique container setup that can conveniently be stationed where power source, water supply and drainage interfaces are available.





# Mobile and Assembled Laboratory

## Laboratory achievements

At present, the whole laboratory aided by Daan Gene to the Iraqi government is in normal operation. The improvement in detection capacity enables the Iraqi government to accelerate the confirmation of patient groups and lay the foundation for the establishment of effective quarantine measures. Considering the current situation, it may be necessary to increase the mobility of sample detection capability.

Daan Gene can realize the mobile van type integrated laboratory, which can be distributed and employed to detect the samples at any time. The mobile van type integrated laboratory made by Daan Gene can effectively improve the detection efficiency, achieve detection of the samples at any point, convenient fast and efficient!



# Mobile and Assembled Laboratory

## The assembled nucleic acid testing laboratory

Set up core work room supporting preparation room, dressing room, buffer room, etc., with an area of about 68m; Adopt the one-way flow design of personnel, the core working room adopts the transmission window and the buffer of air changes is 15 times per hour, the cleanliness level is 100,000, the new air direct expansion combined air conditioning purification unit, the air flow organization form is from top to bottom; At the beginning of the installation of the purification air-conditioning unit, the medium-efficiency filter is used, and the indoor air is supplied with high efficiency; The exhaust air is set up with high-efficiency filtration, in-situ sterilization, and electric biological sealing valve is set, which is made of 304 stainless steel; Detection capacity: 1500 tests can be completed everyday.

### Advantages

- Efficient, accurate fast and safe.
- Independent and integrated, will not affect the existing building structure layout, directly supplement the dedicated nucleic acid laboratory, and quickly improve the detection ability.
- It can be developed, and corresponding functions can be according to the needs of the hospital. To upgrade the detection ability, and have the ability to complete the outpatient clinic.
- Anti-pollution: Sewage, waste, and exhaust generated in the laboratory and specially treated.
- Safety, strictly in accordance with BSL-2 (Biosafety Level 2) + laboratory and PCR testing related standard.
- Simple installation, only need to reserve power, water supply and drainage interfaces on site.

