



PaxGenBio



Smart Diagnostics with **Multiplex PCR & Universal Array Technology**

Leading to a New World of Healthcare

www.paxgenbio.com

About PaxGenBio



PaxGenBio Co., Ltd. is a Korean IVD company that develops and manufactures molecular diagnostic kits with original platform technology.

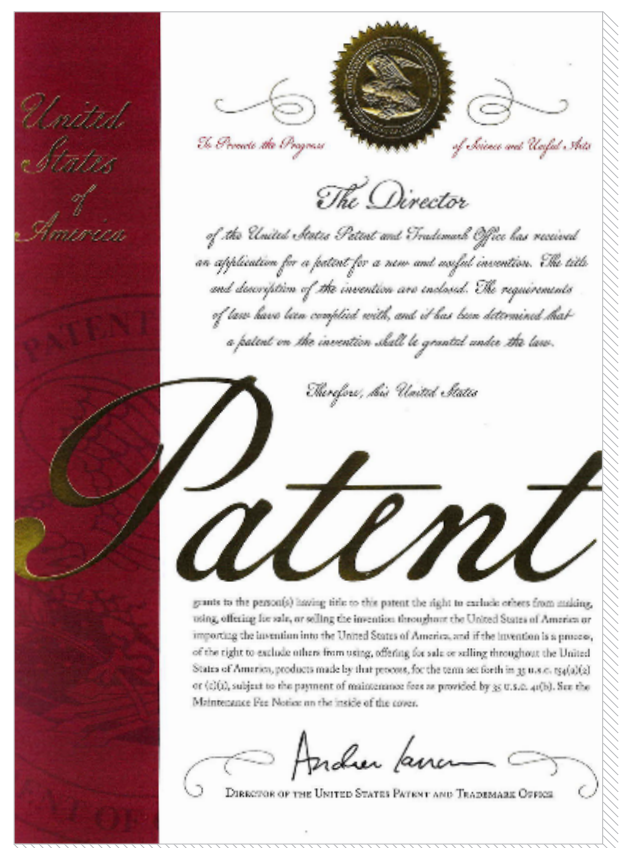
PaxGenBio pursues a world where more people live healthy lives in peace. All members are striving for the mission by developing and providing more accurate and affordable molecular diagnostic kits to more people.

PaxGenBio will make its best effort to listen to the opinions and valuable advice of our customers to make better improvements for further progress and success.

Certificate & Patent



EN ISO13485



Method and Kit for Detecting Target
Nucleic Acid_USA

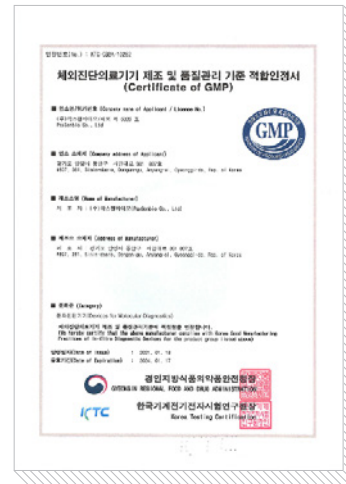
Certificate & Patent



Certificate of Brand K



Designation of promising small and medium-sized export companies



GMP



Certificate EU Product Notification HPV



Certificate EU Product Notification SARS-CoV-2



Certificate EU Product Notification TB/NTM



G-PASS Company



Certificate of Manufacturer



Patent

Proprietary technology MPCR-ULFA

■ Multiplex PCR – ULFA (Universal Lateral Flow Assay)

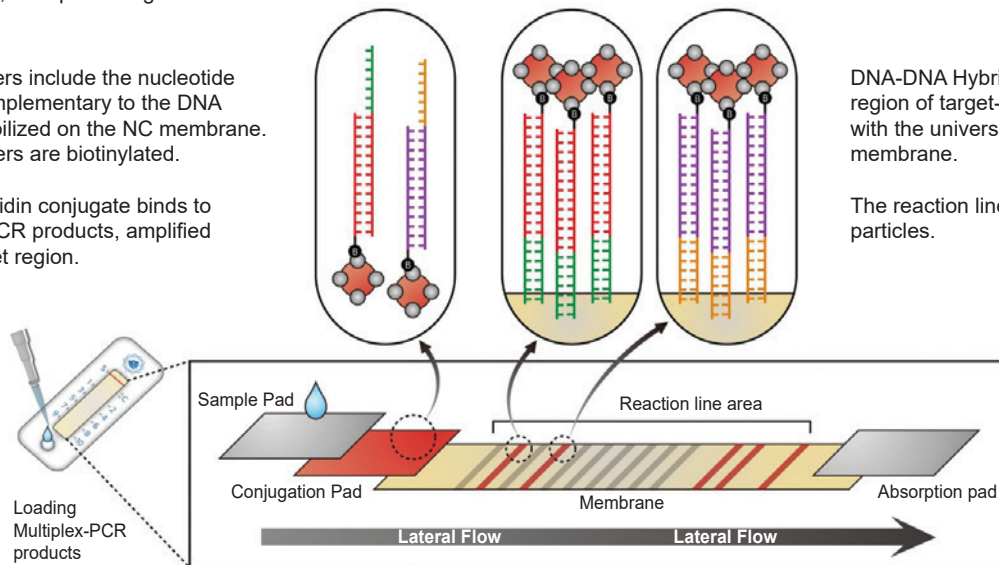
- Convergence of multiplex molecular diagnostics and rapid diagnostic test technology
- Multiplex PCR amplification and DNA-DNA hybridization with universal lateral flow assay for multiple target detection.
- South Korea, U.S. patent registration

Forward primers include the nucleotide sequence complementary to the DNA probes immobilized on the NC membrane. Reverse primers are biotinylated.

Gold-Streptavidin conjugate binds to biotinylated PCR products, amplified genomic target region.

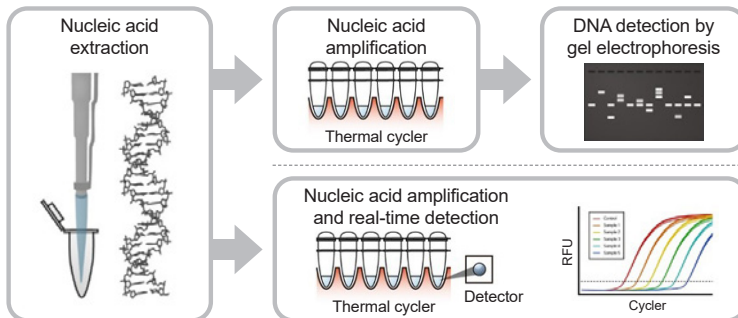
DNA-DNA Hybridization of the universal region of target-amplified PCR product with the universal probe on NC membrane.

The reaction line turns red by nanogold particles.



Smart Molecular Diagnostics Technology MPCR-ULFA

■ Major Molecular Diagnostics Technology



Conventional PCR

Advantage: Affordable price

Disadvantage: a lot of labor/time

Real-time PCR

Advantage: Easy to use

Disadvantages: Difficult to do multiplex over 5-plexes. Expensive reagents

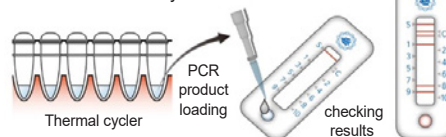
It is required to develop low-cost molecular diagnostic products with maintaining user convenience.

MPCR-ULFA

(Universal Lateral Flow Assay)

Novel molecular diagnostics technology with low cost and great convenience

Target nucleic acid amplification and detection with lateral flow assay



Convenient on-site confirmation of PCR results
Use on inexpensive universal kit (membrane)

Patent No.: 10-1727111(UPAH Tech.)

Patent No.: 10-1795773(CAO Tech.)

■ Rapid Multiplex Molecular Diagnostics System

MPCR (Multiplex PCR)

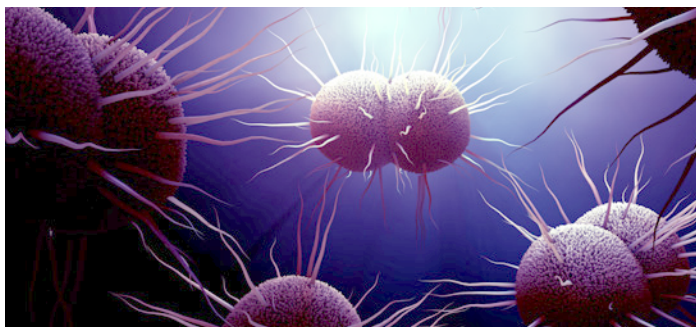
- Simultaneous detection and identification of multiple pathogens

ULFA (Universal Lateral Flow Assay)

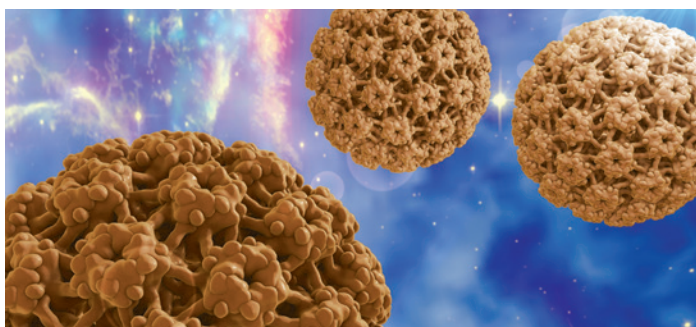
- Rapid detection
- Results interpreted visually within 10 minutes

- High productivity and price competitiveness
- Increased user convenience

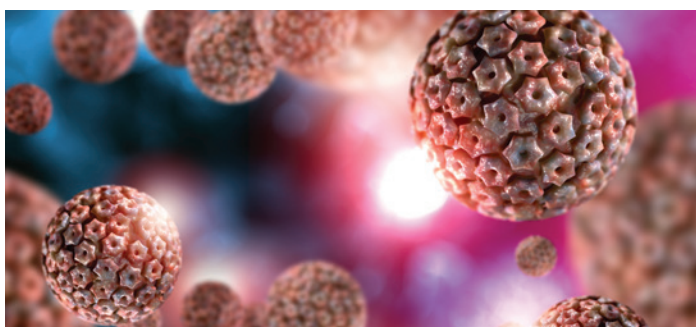
**PaxView® STI12
MPCR-ULFA Kit**



**PaxView® HPV 20 Genotyping
MPCR-ULFA Kit**



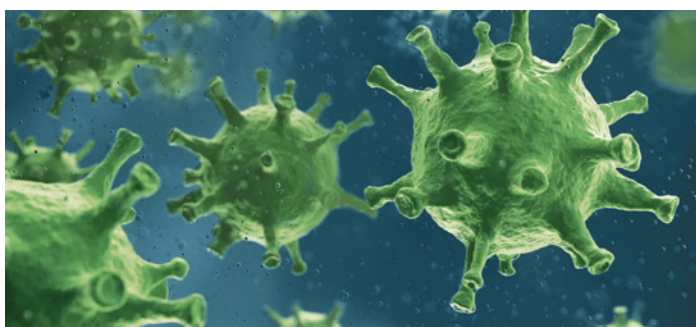
**PaxView® HPV16/18/Others
MPCR-ULFA Kit**



**PaxView® TB/NTM
MPCR-ULFA Kit**



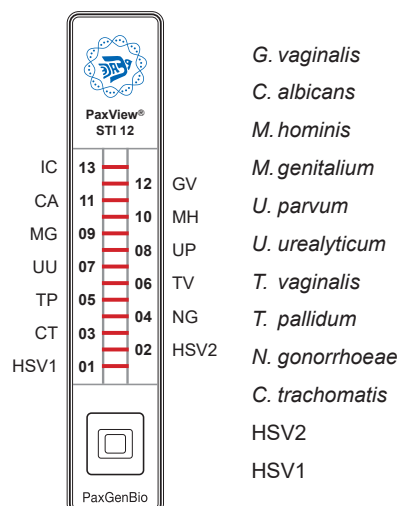
**PaxView® SARS-CoV-2
MPCR-ULFA Kit**



PaxView® STI12 MPCR-ULFA Kit

Simultaneous detection and identification of 12 STI pathogens

PaxView® STI12 MPCR-ULFA Kit is an in vitro diagnostic kit designed for the detection and identification of 12 STIs (sexually transmitted infections) in human urine and vaginal swab samples through MPCR-ULFA (Multiplex PCR and Universal Lateral Flow Assay).



PaxView® STI12 MPCR-ULFA Kit

PaxView® ULFA Reader

The Reader analyzes
the results of 8-cartridge at once

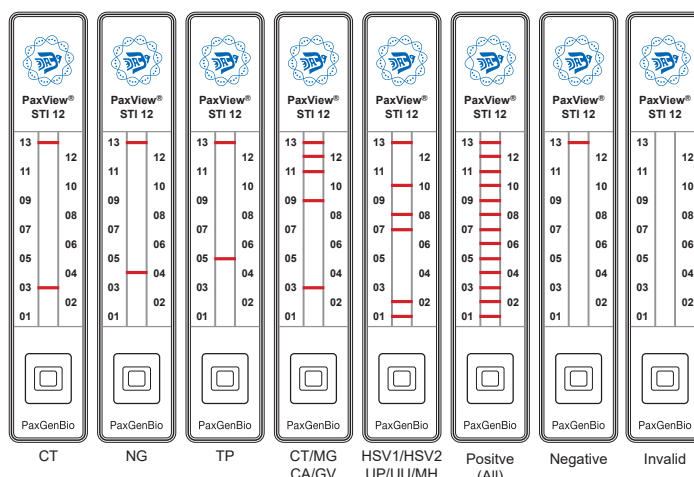
Features and Advantages

- Multiplex PCR for detection of 12 STIs in a single tube
- All kinds of PCR thermocyclers are available for the assay
- Easy analysis with 8-cartridge and PaxView® ULFA Reader
- ULFA results within 10 minutes
- Prevention of PCR carry-over contamination with the use of UDG

Order information

Model	PaxView® STI12 MPCR-ULFA Kit
Package	96 tests/kit
Cat. No.	V0212N
Storage	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
Expiration date	12 months

Interpretation





PaxView® HPV 20 Genotyping MPCR-ULFA Kit

Simultaneous detection and genotyping of 20 different HPV genotypes including 14 high-risk HPV types

PaxView® HPV 20 Genotyping MPCR-ULFA Kit is an in vitro diagnostic kit designed for the detection and genotyping of 20 different human papillomavirus (HPV) types in human cervical swab samples through MPCR-ULFA (Multiplex PCR and Universal Lateral Flow Assay).



Features and Advantages

- Composed of 2 panels. Each panel detects 10 types of HPV.
- 14 high-risk HPV types (16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68)
- 2 probably high-risk HPV types (53, 73)
- 4 low-risk HPV types (6, 11, 69, 70)
- Monitor the entire process including the sample collection, DNA extraction, and PCR through the amplification of the human β -globin gene as an internal control
- Prevention of PCR carry-over contamination with the use of UDG
- All kinds of PCR thermocyclers are usable for the assay
- User-friendly and convenient method
- ULFA results within 20 minutes

Multiplex MDx

User Convenience

Cost Effectiveness

U.S. Patent Registered

Procedure

DNA Extraction

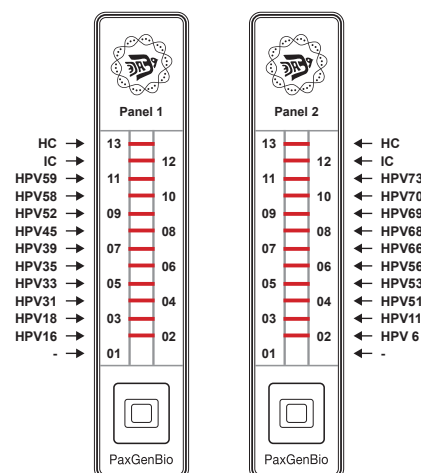
DNA Amplification

ULFA Detection

Order information

Model	PaxView® HPV 20 Genotyping MPCR-ULFA Kit
Package	48 tests/kit
Cat. No.	V0324F
Storage	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
Expiration date	12 months

Interpretation



PaxView® HPV16/18/Others MPCR-ULFA Kit

**Simultaneous detection of HPV16, HPV18, and other HPV types
Screening kit for HPV**

PaxView® HPV16/18/Others MPCR-ULFA Kit is an in vitro diagnostic kit designed for the qualitative detection of human papillomavirus (HPV) type 16 and 18, and other HPV types in human cervical swab samples through MPCR-ULFA (Multiplex PCR and Universal Lateral Flow Assay).



Features and Advantages

- Monitor the entire process including the sample collection, DNA extraction, and PCR through the amplification of the human β -globin gene as an internal control
- Prevention of PCR carry-over contamination with the use of UDG
- All kinds of PCR thermocyclers are usable for the assay
- User-friendly and convenient method
- ULFA results within 10 minutes

Multiplex MDx

**User
Convenience**

**Cost
Effectiveness**

**U.S. Patent
Registered**

Procedure

DNA Extraction

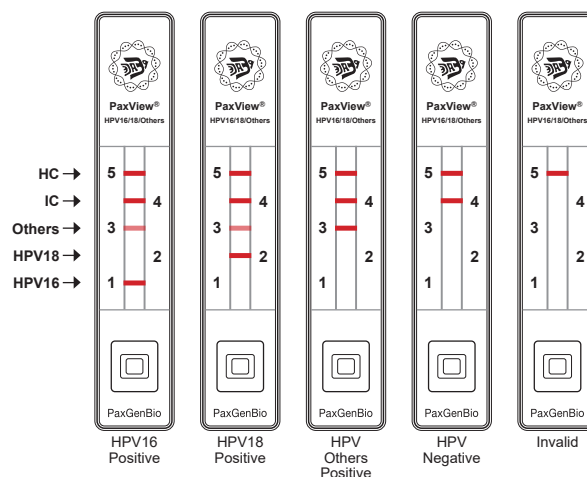
DNA Amplification

ULFA Detection

Order information

Model	PaxView® HPV16/18/Others MPCR-ULFA Kit
Package	48 tests/kit
Cat. No.	V0301F
Storage	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
Expiration date	12 months

Interpretation



PaxView® TB/NTM MPCR-ULFA Kit

Simultaneous detection of Mycobacterium tuberculosis and non-tuberculous mycobacteria

PaxView® TB/NTM MPCR-ULFA Kit is an in vitro diagnostic kit designed for the simultaneous detection of Mycobacterium tuberculosis (TB) and non-tuberculous mycobacteria (NTM) in sputum specimens through MPCR-ULFA (Multiplex PCR and Universal Lateral Flow Assay).



Features and Advantages

- Target gene: IS6110 and mtp40 for TB, and rpoB for NTM
- High sensitivity and specificity
- All kinds of PCR thermocyclers are usable for the assay
- User-friendly and convenient method
- Prevention of PCR carry-over contamination with the use of UDG
- ULFA results within 10 minutes

Multiplex MDx

User Convenience

Cost Effectiveness

U.S. Patent Registered

Procedure

DNA Extraction

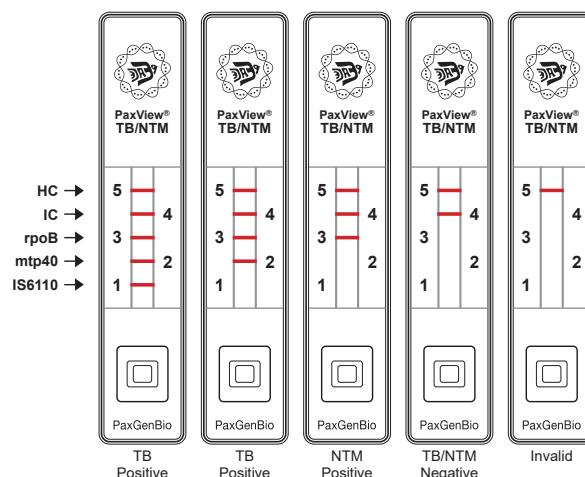
DNA Amplification

ULFA Detection

Order information

Model	PaxView® TB/NTM MPCR-ULFA Kit
Package	48 tests/kit
Cat. No.	V0401F
Storage	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
Expiration date	12 months

Interpretation



PaxView® SARS-CoV-2 MPCR-ULFA Kit

Detection of COVID-19 causative virus SARS-CoV-2

PaxView® SARS-CoV-2 MPCR-ULFA Kit is an in vitro diagnostic kit designed for the qualitative detection of SARS-CoV-2 viral RNA in human upper respiratory specimens such as oropharyngeal or nasopharyngeal swabs through MPCR-ULFA (Multiplex PCR and Universal Lateral Flow Assay).



Features and Advantages

- Target gene: Orf1ab (RdRp) and N gene
- Monitor the entire process including the sample collection, RNA extraction, and RT-PCR through the amplification of the human RNase P gene as an internal control
- One-step RT-PCR in a single tube
- Prevention of PCR carry-over contamination with the use of UDG
- All kinds of PCR thermocyclers are usable for the assay
- User-friendly and convenient method
- ULFA results within 10 minutes

Multiplex MDx

**User
Convenience**

**Cost
Effectiveness**

**U.S. Patent
Registered**

Procedure

RNA Extraction

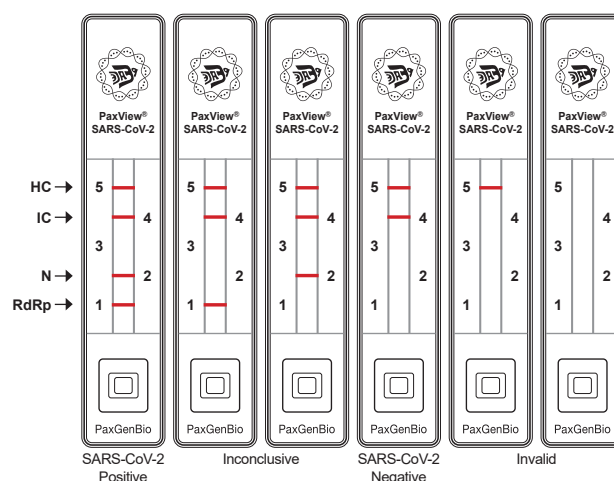
Amplification

ULFA Detection

Order information

Model	PaxView® SARS-CoV-2 MPCR-ULFA Kit
Package	96 tests/kit
Cat. No.	V0531N
Storage	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
Expiration date	12 months

Interpretation

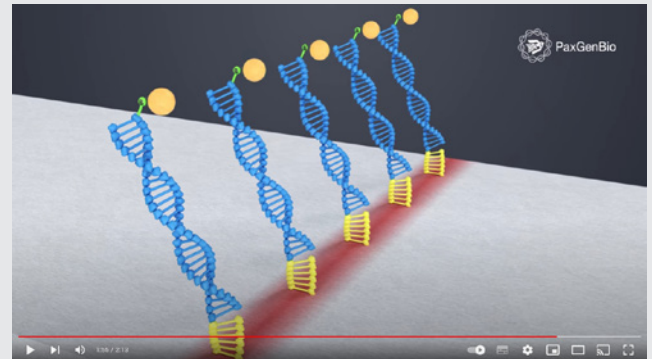


Introduction of PaxGenBio Products



YouTube Link: <https://youtu.be/uqGTgbk-Cdw>

PaxView® MPCR-ULFA Technology



YouTube Link: <https://youtu.be/ZDyGmxk65qU>

PaxView® STI12 MPCR-ULFA Kit



YouTube Link: <https://youtu.be/BrmEjAPAdAa>

PaxView® HPV 20 Genotyping MPCR-ULFA Kit



YouTube Link: <https://youtu.be/srC0Im-1HRw>

PaxView® HPV16/18/Others MPCR-ULFA Kit



YouTube Link: <https://youtu.be/hc89hbyh4f8>

PaxView® SARS-CoV-2 MPCR-ULFA Kit



YouTube Link: <https://youtu.be/JxNwPvEgDCo>



PaxGenBio

PaxGenBio Co., Ltd.

Rm 803, 361, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Republic of Korea
T. +82-31-244-5036 F. +82-31-244-5037 E. mkt@paxgenbio.com W. www.paxgenbio.com