


Vol.2021



PaxGenBio



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



Leading to a New World of Healthcare

[www.paxgenbio.com](http://www.paxgenbio.com)

# COMPANY INTRODUCTION

## About PaxGenBio



**PaxGenBio**

**PaxGenBio Co., Ltd.** was established in 2015 as a molecular diagnostics company that develops, manufactures and markets a portfolio of IVD products targeting infectious diseases and cancers.

PaxGenBio applies its proprietary, chimeric technologies that combine techniques for molecular and immune diagnostics.

One of its proprietary technologies, MPCR-ULFA that combines multiplex PCR amplification and universal lateral flow assay (ULFA) enables sensitive, specific, fast, affordable and easy nucleic acid tests that are especially appropriate for applications in low resource settings.

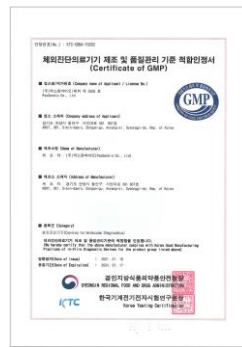
## Certificate & Patent



Certificate of Brand K



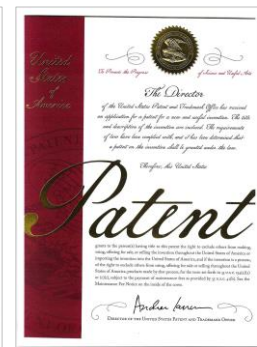
Designation of promising small and medium-sized export companies



GMP



G-PASS Company



Method and Kit for Detecting Target Nucleic Acid\_USA



Certificate EU Product Notification HPV



Certificate EU Product Notification SARS-CoV-2



Certificate EU Product Notification TB/NTM



EN ISO13485



Certificate of Manufacturer



• Company Name	PaxGenBio Co., Ltd.		
• CEO	Young Suk Park	• Date of Establishment	May 1, 2015
• Business field	Development and Sales in Convergence Technology of Molecular/Immune Diagnostic Product		
• Business Conditions	Manufacture and Wholesale of Bio Products		
• Address	#803~807, 361, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Republic of Korea		
• Tel	+82-31-244-5036	• Fax	+82-31-244-5037
• Email	info@paxgenbio.com	• Homepage	www.paxgenbio.com

## Company History

2021	03	• Designation of Excellent Company for overseas public procurement market
	02	• CE-IVD (PaxView® SARS-CoV-2 MPCR-ULFA Kit)
2020	12	• Designation of Promising Expert Small and Medium Enterprise by MSS • Designation of Brand K (COVID-19 Diagnostic Kit)
	03	• CE-IVD (PaxView® COVID-19 real-time RT-PCR Kit)
	02	• CE-IVD (PaxView® HPV20 Genotyping MPCR-ULFA Kit)
2019	09	• Minister award given by Ministry of SMZs and Startups(MSS)
	07	• KGMP and Manufacturing License(Relocation Approval)
2018	11	• Acquire INNOBIZ Certificate • CE-IVD (PaxView® TB, HPV16/18 MPCR-ULFA Kit)
2017	12	• Acquire Certificate of KGMP
	11	• CE-IVD (PaxView® TB/NTM, HPV16/18/Others MPCR-ULFA Kit) • Acquire Certificate ISO13485
2016	04	• Acquire MFDS Certificate of medical device manufacture
	03	• Registered as a Bio-Venture Company (KOTEC)
2015	08	• Acquire approval of R&D Center (KOITA 2015113870)
	05	• Established PaxGenBio Co., Ltd.

## TECHNOLOGY

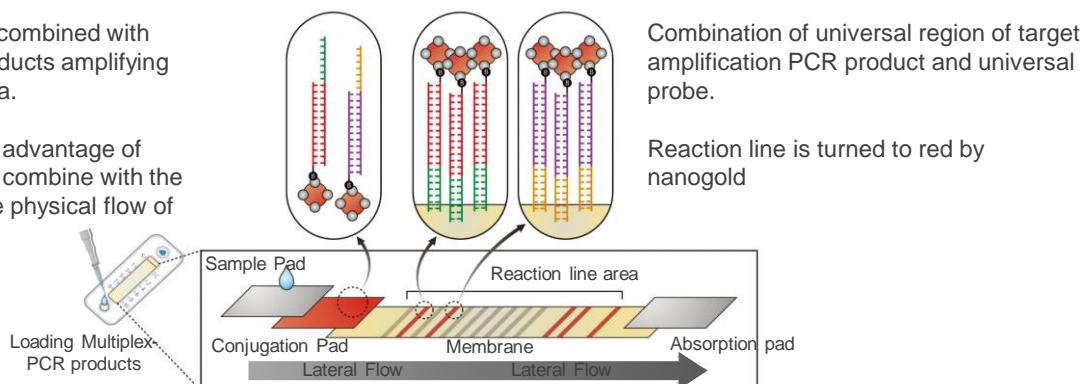
### Proprietary patent technology MPCR-ULFA

#### Multiplex PCR – Universal Lateral Flow Assay

- Convergence of Multiplex Molecular Diagnosis and Rapid diagnostic test Technology
- The proprietary technology of PaxGenBio, which can be combined with the universal probe of the NC membrane regardless of the sequence of PCR products.
- South Korea, U.S. patent registration, application from seven foreign countries

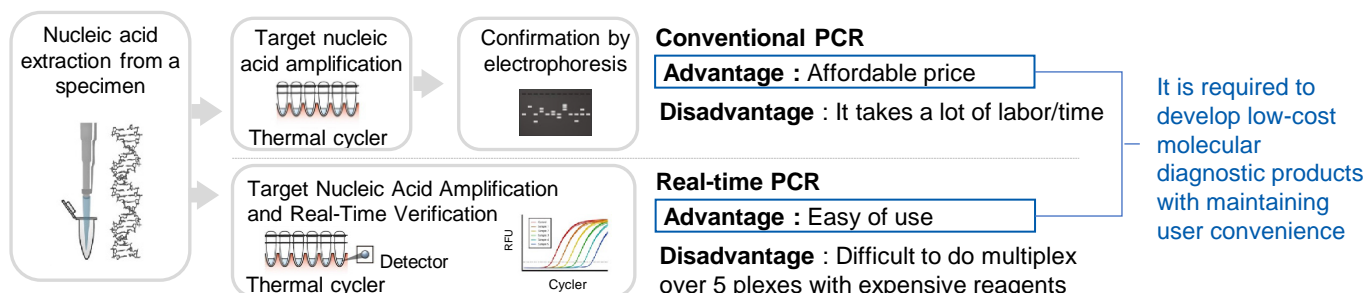
Gold-Strepto Avidin is combined with biotin labeled PCR products amplifying the genomic target area.

Nanogold also has the advantage of improving the ability to combine with the probe by facilitating the physical flow of PCR products.



### Smart Molecular Diagnosis Technology MPCR-ULFA

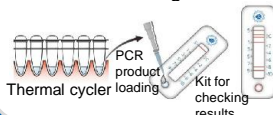
#### Existing Major Molecular Diagnostic Product Technology



#### MPCR-ULFA (Universal Lateral Flow Assay)

New molecular diagnosis technology with low cost and convenience

Target nucleic acid amplification and confirmation using 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 Diagnosis System

##### MPCR (Multiplex Polymerase Chain Reaction)

- Multiple diagnosis possible
- Simultaneous amplification of various disease-related genes

##### ULFA (Universal Lateral Flow Assay array)

- Rapid diagnosis possible
- Results interpretation within 10 to 20 minutes

- Securing high productivity and price competitiveness
- User convenience increase

# PaxView® SARS-CoV-2 MPCR-ULFA Kit



**Rapid and convenient molecular diagnostic kit.  
SARS-CoV-2 infection results can be visually checked.**

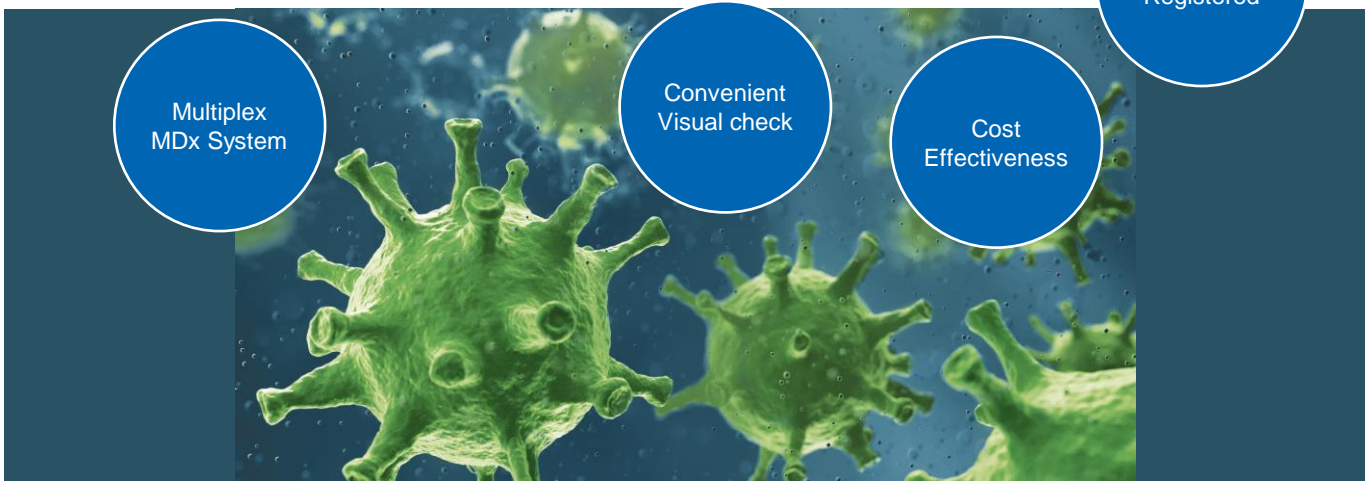
PaxView® SARS-CoV-2 MPCR-ULFA Kit is a new molecular diagnostics technology that uses PaxGenBio's patented technology MPCR-ULFA (Multiplex PCR – Universal Lateral Flow Assay ) and has cost-effectiveness and convenience consisting of MPCR Kit and ULFA Kit.



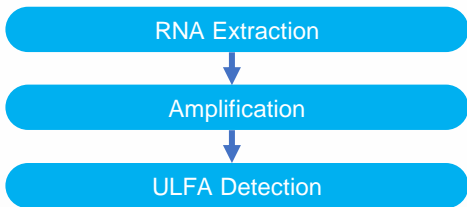
## Features and Advantages

- Application of MPCR-ULFA (Multiplex PCR-Universal Lateral Flow Assay) platform technology, a proprietary patented technology
- One-step RT-PCR in a single tube
- Monitor the entire process including the sample collection, RNA extraction, and RT-PCR through using internal control, Human RNase P gene
- The target genes Orf1ab(RdRp) and N gene
- Limit of detection(LoD) is 10 copies/μl (50 copies/reaction)
- Prevention of PCR carry over contamination using UDG system
- All PCR equipment can be used
- User-friendly & Simple method
- Visual check of results (10 minutes), Easy of use

U.S. Patent  
Registered



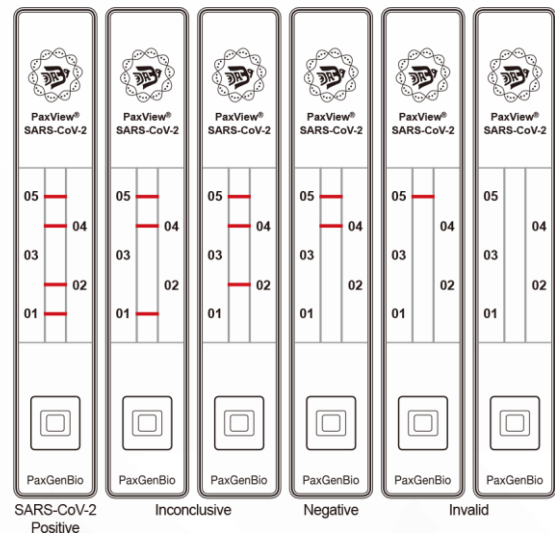
## Procedure



## Order information

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

## Interpretation



# PaxView® HPV 20 Genotyping MPCR-ULFA Kit

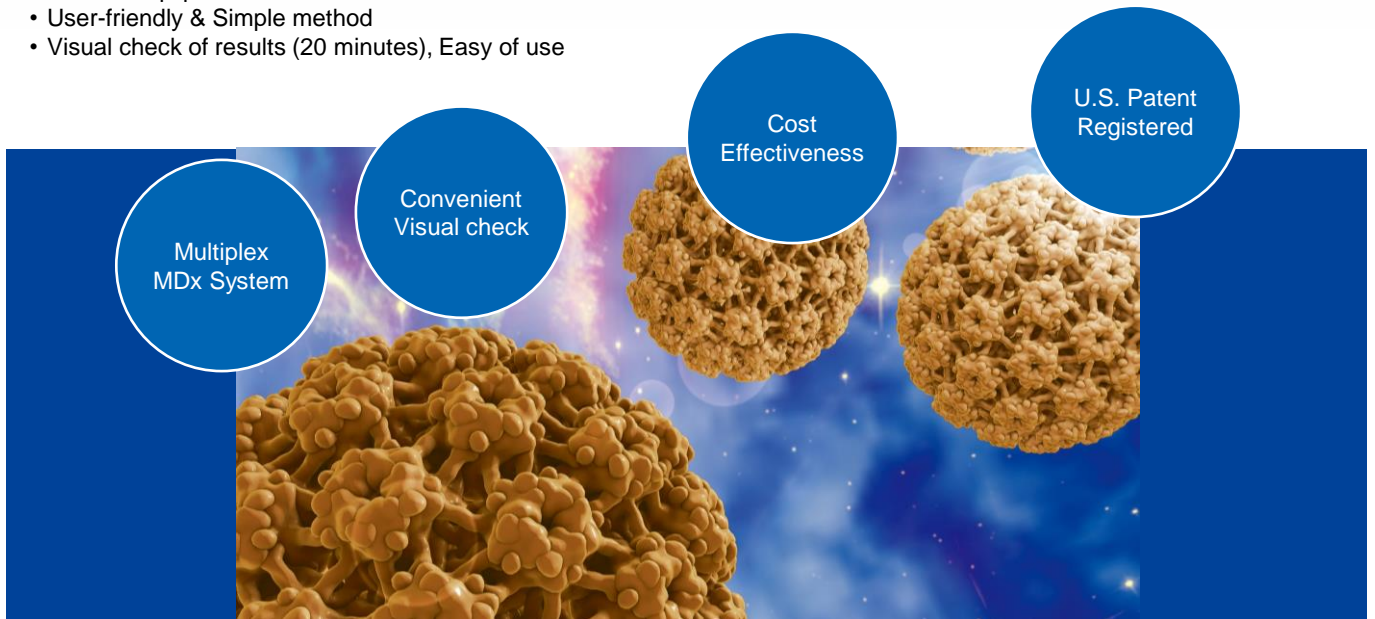


**Rapid and convenient molecular diagnostic kit. Identification of 20 different HPV genotypes results can be visually checked.**

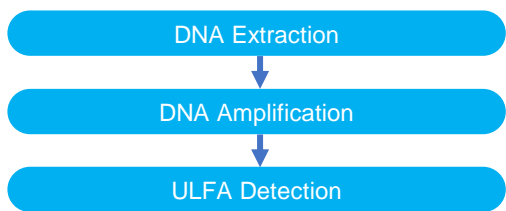
PaxView® HPV 20 Genotyping MPCR-ULFA Kit is a new molecular diagnostics technology that uses PaxGenBio's patented technology MPCR-ULFA (Multiplex PCR – Universal Lateral Flow Assay ) with cost-effectiveness and convenience consisting of MPCR Kit and ULFA Kit.

## Features and Advantages

- Application of MPCR-ULFA (Multiplex PCR-Universal Lateral Flow Assay) platform technology, a proprietary patented technology
- Monitor the entire process including the sample collection, DNA extraction, and PCR through using internal control, human  $\beta$ -globin gene
- Prevention of PCR carry over contamination using UDG system
- All PCR equipment can be used
- User-friendly & Simple method
- Visual check of results (20 minutes), Easy of use



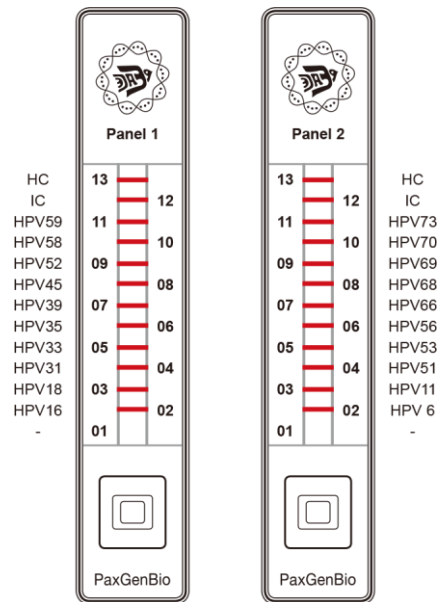
## Procedure



## Order information

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

## Interpretation





# PaxView® HPV 16/18/Others MPCR-ULFA Kit

CE IVD



**Rapid and convenient molecular diagnostic kit.**  
**Detection of two high-risk types (16, 18) and other DNA that all HPV types have in common results can be visually checked.**

PaxView® HPV 16/18/Others MPCR-ULFA Kit is a new molecular diagnostics technology that uses PaxGenBio's patented technology MPCR-ULFA (Multiplex PCR - Universal Lateral Flow Assay) with cost-effectiveness and convenience consisting of MPCR Kit and ULFA Kit.

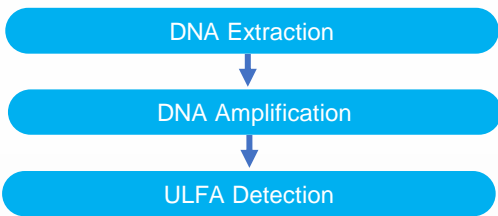


## Features and Advantages

- Application of MPCR-ULFA (Multiplex PCR-Universal Lateral Flow Assay) platform technology, a proprietary patented technology
- Monitor the entire process including the sample collection, DNA extraction, and PCR through using internal control, human  $\beta$ -globin gene
- Prevention of PCR carry over contamination using UDG system
- All PCR equipment can be used
- User-friendly & Simple method
- Visual check of results (10 minutes), Easy of use



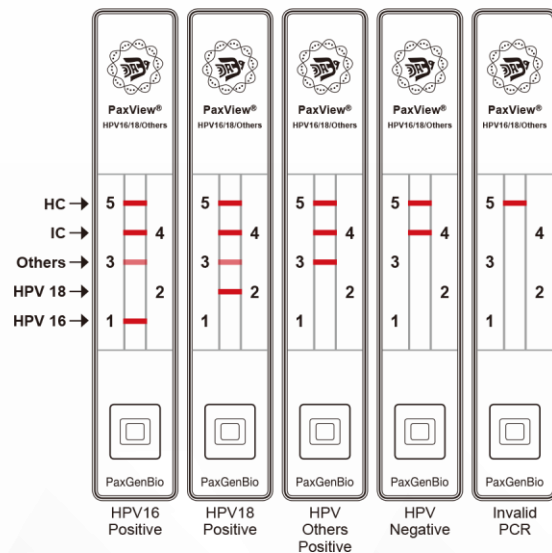
## Procedure



## Order information

<b>Model</b>	PaxView® HPV 16/18/Others MPCR-ULFA Kit
<b>Package</b>	48 tests/kit
<b>Cat.No.</b>	V0301F
<b>Storage</b>	MPCR : -25 ~ -15°C ULFA : 15 ~ 30°C
<b>Expiration date</b>	12 months

## Interpretation





# PaxView® TB/NTM MPCR-ULFA Kit

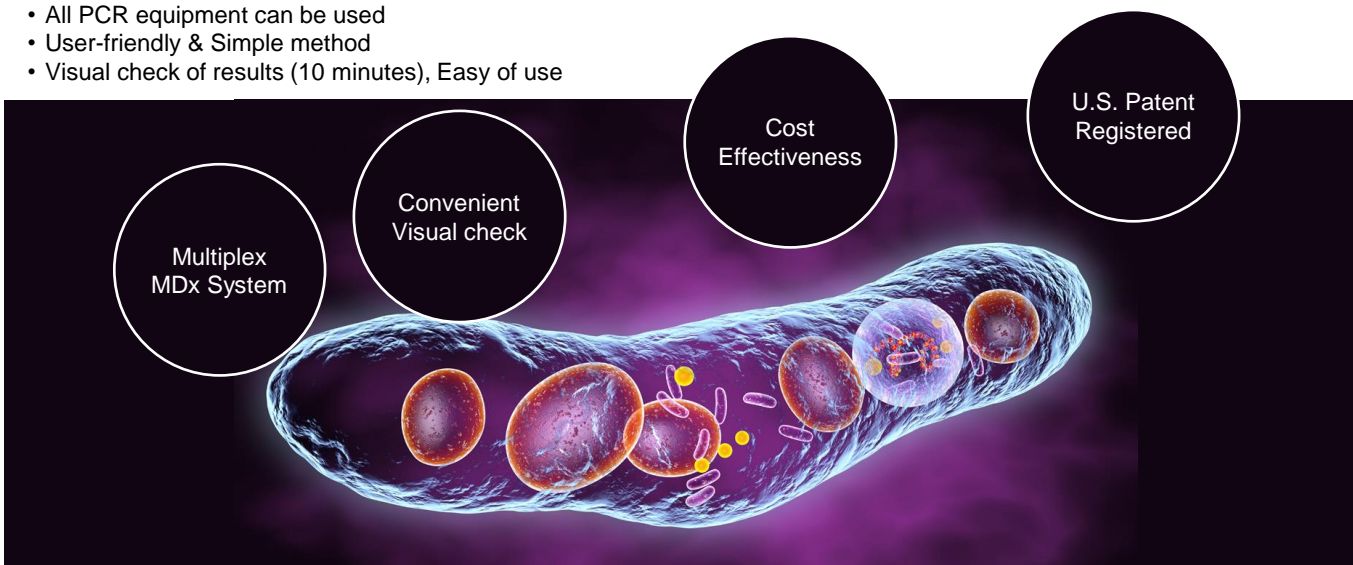
**Rapid and convenient molecular diagnostic kit for the infection and genotype analysis by naked eye**

PaxView® TB/NTM MPCR-ULFA Kit is a new molecular diagnostics technology that uses PaxGenBio's patented technology MPCR-ULFA (Multiplex PCR - Universal Lateral Flow Assay) and has an economical cost and convenience consisting of MPCR Kit and ULFA Kit.

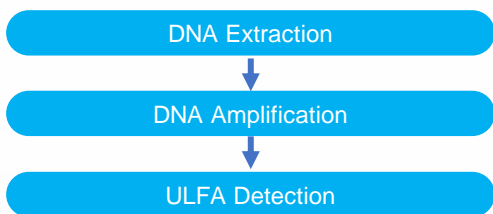


## Features and Advantages

- Simultaneous diagnosis of infection with Mycobacterium tuberculosis complex (MTBC) and Nontuberculous mycobacteria (NTM)
- Application of MPCR-ULFA (Multiplex PCR – Universal Lateral Flow Assay), the proprietary patented technology of PaxGenBio
- Amplify and detect specific genes, IS6110 or mtp40 for Mycobacterium tuberculosis and rpoB gene for NTM
- High sensitivity and specificity
  - Limit of detection (LoD); MTBC: 2 copies/μl, NTM: 10 copies/μl
- All PCR equipment can be used
- User-friendly & Simple method
- Visual check of results (10 minutes), Easy of use



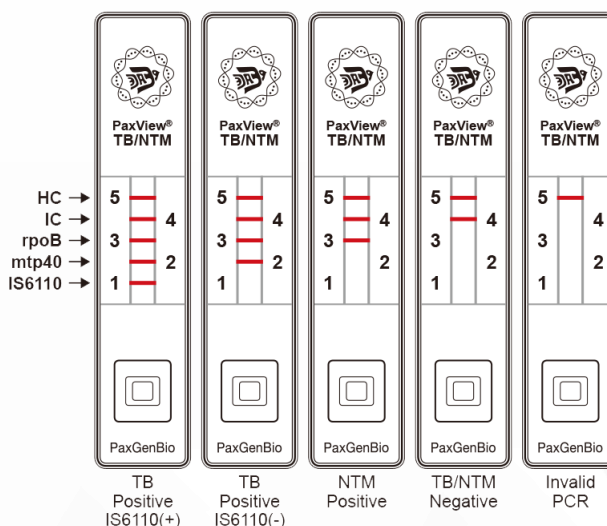
## Procedure



## Order information

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

## Interpretation





VOD

PaxView® MPCR-ULFA Technology



PaxView® MPCR-ULFA Kit User Instructions





PaxGenBio



## **PaxGenBio Co., Ltd.**

#803-807, 361, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Republic of Korea  
T. +82-31-244-5036 F. +82-31-244-5037 E. [info@paxgenbio.com](mailto:info@paxgenbio.com) W. [www.paxgenbio.com](http://www.paxgenbio.com)