

# PaxView® HPV 20 Genotyping MPCR-ULFA Kit

CE IVD

**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).



Multiplex MDx

User  
Convenience

Cost  
Effectiveness

U.S. Patent  
Registered



## ■ 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)
- Prevention of PCR carry-over contamination with the use of UDG
- Monitor the entire process including the sample collection, DNA extraction, and PCR through the amplification of the human  $\beta$ -globin gene as an internal control
- All kinds of PCR thermocyclers are usable for the assay
- User-friendly and convenient method
- ULFA results in 20 minutes

PaxView® HPV 20 Genotyping MPCR-ULFA Kit utilizes PaxGenBio's proprietary technology. PCR primers amplifying target genes include the nucleotide sequence complementary to the universal probe immobilized on NC membrane. DNA-DNA hybridization between the probe and its complementary sequence of one end of PCR products with lateral flow assay enables detection of target genes.



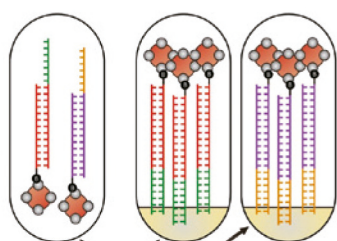
## Proprietary technology MPCR-ULFA

### ■ 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

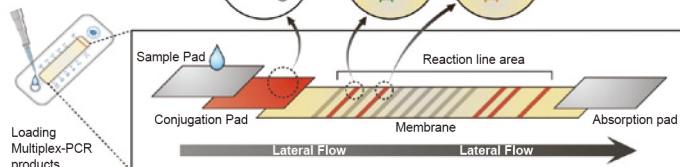
Forward primers include the nucleotide sequence complementary to the DNA probes immobilized on the NC membrane. Reverse primers are biotinylated.

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

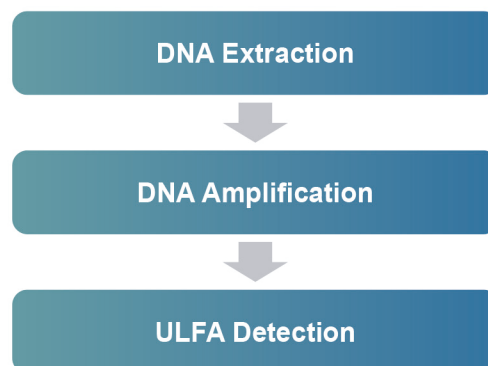


DNA-DNA Hybridization of the universal region of target-amplified PCR product with the universal probe on NC membrane.

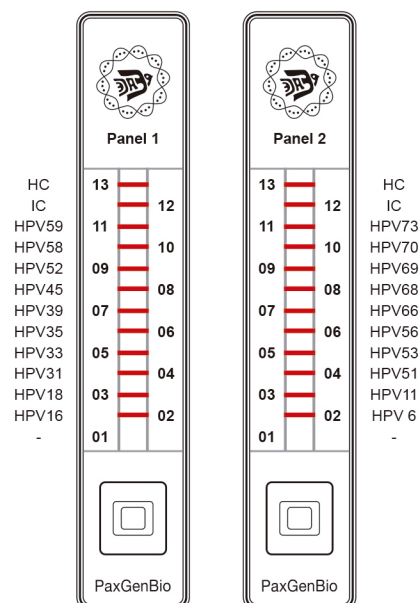
The reaction line turns red by nanogold particles.



## Procedure

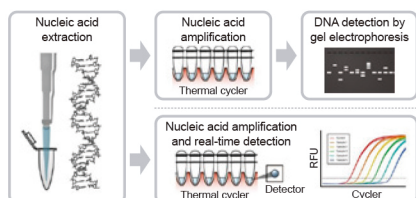


## Interpretation



## 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

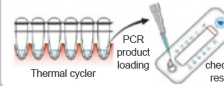
It is required to develop low-cost molecular diagnostic products with maintaining user convenience.

#### 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

## 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

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

