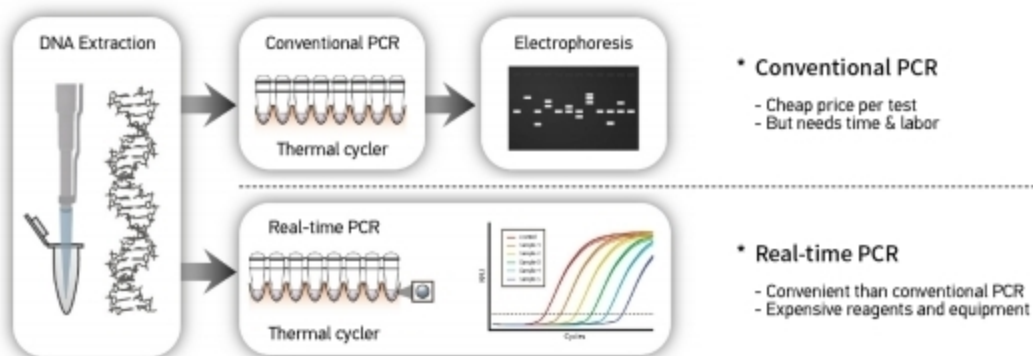


MPCR-ULFA system

Overview

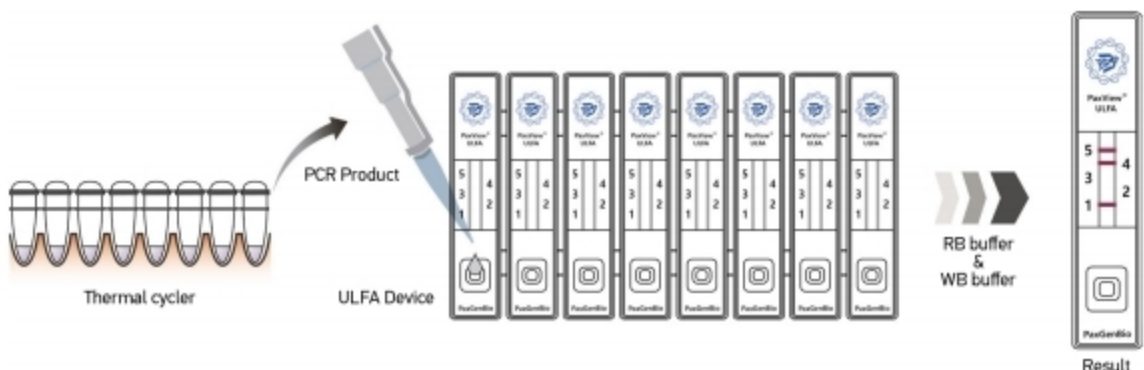
The lateral flow assay is a simple device designed to detect the presence (or absence) of a target analyte in a sample without the need for a specialized and costly equipment. The Multiplex PCR (MPCR) is the most sensitive among all rapid techniques by which microbial pathogens in clinical specimen can be detected. In particular, when specific pathogens that are difficult to culture in vitro or require a long cultivation period are expected to be present in specimens, the diagnostic value of PCR is known to be significant. However, it does require additional procedures and equipment and the amount of labor for gel electrophoresis. Therefore it needs an improvement for test in a small scale laboratory.



[Figure 1. The DNA amplification based molecular diagnostic technology]

Principles

The MPCR-ULFA is an original technology that can amplify a target gene from the sample with the use of target specific primers and enable the visual inspection of a result of DNA hybridization on the nitrocellulose membrane between amplified single stranded DNA and complementary universal probe. When reaction buffer including PCR product is added to the sample pad, it moves to the nitrocellulose membrane and hybridizes along with universal probe that is immobilized on the specific region of the nitrocellulose membrane. Finally, it is easy to visually check the result within 20 min after adding PCR product.



[Figure 2. The scheme and procedures of the MPCR-ULFA Kit]

Kit Components



[Figure 3. Component 1. MPCR Kit]



[Figure 4. Component 2. ULFA Kit]

Features and Benefits

- Capable of visually checking result within 20 min
- Applying non-invasive sample such as urine / sputum / cervical swab
- High sensitive and low price

	DNA extraction	PCR	Gel electrophoresis	Assay time
Conventional PCR	0	0	0	5.0 hr
MPCR-ULFA	0	0	X	2.5 hr

[Table 1. The comparison test procedures and assay time between conventional PCR and MPCR-ULFA]

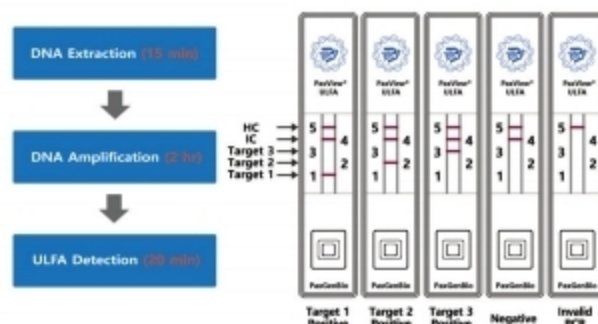
Specimen & Storage

- Urine / sputum / cervical swab
- PaxView® Component 1. MPCR Kit: storage at -25 - -15 °C
- PaxView® Component 2. ULFA Kit: storage at 15 - 30 °C

Applications

- Sexually transmitted infections detection kit
- Human papilloma virus detection and genotyping kit
- *Mycobacterium tuberculosis*(MTB) and non-tuberculous mycobacteria(NTM) detection kit

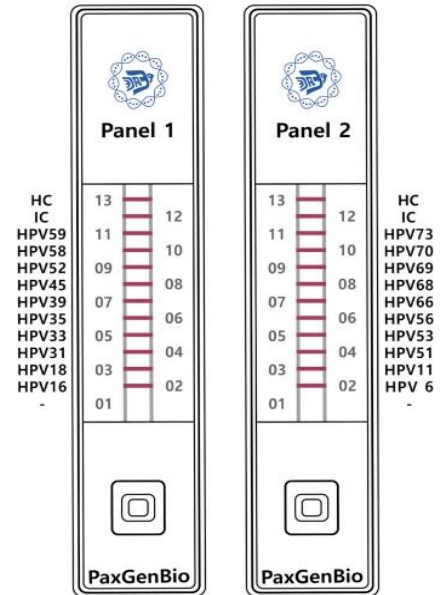
Performance



PaxView® HPV 20 Genotyping MPCR-ULFA Kit CE IVD



PaxView® HPV 20 Genotyping



Target line

- HC: Hybridization Control
- IC: Internal Control
- HPV: Human papillomavirus

Target	HPV 6, 11, 16, 18, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66, 68, 69, 70 and 73
Sample type	Cervical swab
Reaction time	2.5hr
Description	<p>The kit is comprised of MPCR kit for the multiplex PCR amplification of HPV DNA and ULFA kit for the detection of amplified PCR products.</p> <p>After PCR amplification with MPCR kit, the PCR reaction is loaded into the ULFA device to check the PCR results.</p>
Ordering info.	Cat. # V0324F / 48test/Kit

