

# Neisseria gonorrhoeae, Ureaplasma urealyticum Nucleic Acid Detection Kit (Fluorescent PCR)

## Product Introduction

The incidence of sexually transmitted diseases (STD) has been increasing year by year in recent years. Ureaplasma urealyticum (UU) and Neisseria gonorrhoeae (NG) are the common pathogens causing STD and urogenital systemic diseases. At present, reproductive tract infection has become a global reproductive health and public health problem, and the Ministry of Health has listed it as a priority for prevention and control.

This kit uses real-time fluorescent PCR technology, primers and Taqman probes are designed in the conserved regions of Neisseria gonorrhoeae (NG) and Ureaplasma urealyticum (UU). It is used for the qualitative detection of Neisseria gonorrhoeae and Ureaplasma urealyticum nucleic acid in male urethral swabs and female cervical swabs from suspected cases. The internal gene was act as a non-competitive internal control during the extraction and detection process. In addition, UDG enzyme and DUTP anti-contamination measures were added in this kit to avoid false positive results.

## Product Features



- **High sensitivity:** Limit of detection is 500 copies/mL.
- **Rapid detection:** Results are obtained within 70 minutes.
- **Highly specific detection:** No cross reactivity has been observed by testing the clinical positive specimens such as HPV16, HPV18, HSV II, Treponema pallidum, Mycoplasma hominis, Staphylococcus aureus, Escherichia coli, Gardnerella vaginalis, Candida albicans, Trichomonas vaginalis, Lactobacillus froriis, Adenovirus, Human cytomegalovirus, Streptococcus b, Lactobacillus casei
- **Strong detection and coverage ability** include 14 serotypes of Ureaplasma urealyticum (P1-P14) and 10 strains of Neisseria gonorrhoeae.
- **CE IVD Certificate Diagnostic Test**

Parameters	Description
Sample	Male urethral swabs and female cervical swabs
Sensitivity	500 copies/mL
Accuracy	CV < 5%
Detection Ability	It can detect 14 serotypes of <i>Ureaplasma urealyticum</i> (P1-P14) and 10 strains of <i>Neisseria gonorrhoeae</i>
Support Instrument	Bioer LineGene 9600 Plus (FQD-96A) or QuantGene 9600 (FQD-96C)
Detection Time	≤70 min
Storage Condition	-25°C ~ -15°C away from light

## Application case

**Case1** The enterprise positive references of different serotypes (P1-P14) in the human ureaplasma nucleic acid national reference and the positive references (P1-P10) in the gonorrhea PCR kit reference were extracted with Bioer Technology's nucleic acid purification reagent and then tested by this product, the results are shown below.

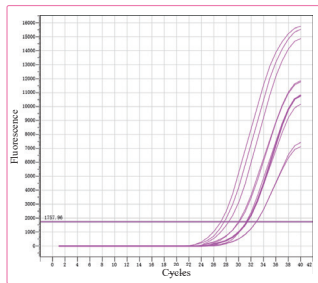


Figure 1 Test results of positive references (P1-P10) in the gonorrhea PCR kit reference

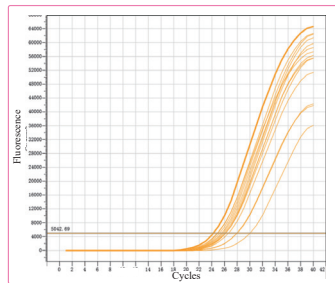


Figure 2. Test results of Test results of positive references (P1-P10) in the gonorrhea PCR kit reference

**Case2** The precision references J1 & J2 of ureaplasma urealyticum and J1&J2 of neisseria gonorrhoeae were extracted using Bioer nucleic acid purification reagent and then were tested by this kit. The whole tests were repeated 10 times to verify the precision.

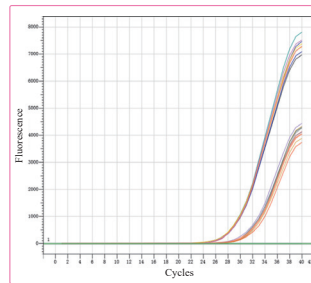


Figure 3. Test results of Neisseria gonorrhoeae precision references (J1&J2)

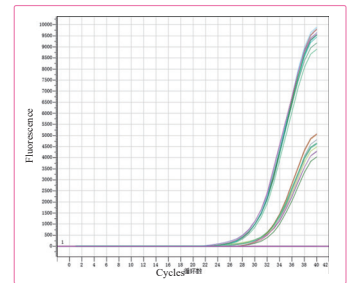


Figure 4. Test results of Ureaplasma urealyticum precision references (J1&J2)

※ **Conclusion**: The results showed that the coincidence rate of this kit to positive references were 100%, indicating that this kit has excellent performance.

※ **Conclusion**: The results showed that the precision variation coefficients of the tests were all less than 5%, indicating that the reagents had good precision.

**Case3** The extracted nucleic acid of *Neisseria gonorrhoeae* and *Ureaplasma urealyticum* clinical samples were tested with this reagent. At the same time, the competitive reagent in the market were compared to verify the coincidence rate.

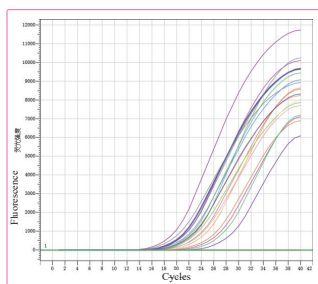


Figure 5. Clinical samples (*Neisseria gonorrhoeae*) detected by Bioer's reagent

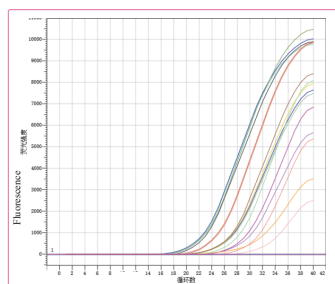


Figure 6. Clinical samples (*Ureaplasma urealyticum*) detected by Bioer's reagent

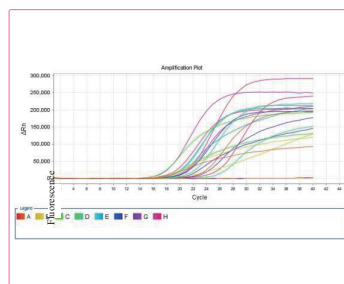


Figure 7. Clinical samples (*Neisseria gonorrhoeae*) detected by competitive reagent

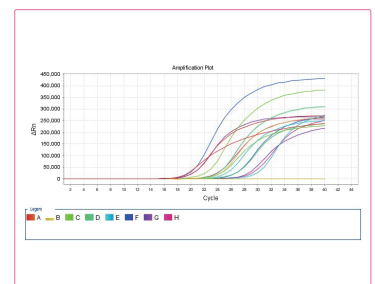


Figure 8. Clinical samples (*Ureaplasma urealyticum*) detected by competitive reagent

※ **Conclusion**: The results showed that compared with the competitive reagent, the Bioer's reagent had higher detection coincidence rate and amplification efficiency.

## Ordering Information

Product Name	Cat#	Package	Notes
<i>Neisseria gonorrhoeae</i> , <i>Ureaplasma urealyticum</i> Nucleic Acid Detection Kit (Fluorescent PCR)	BSJ22S1	32T	The kit can be stored for 3 days at 2-8°C after opening.