DF-5

QuickGene DNA tissue kit S (DT-S)
QuickGene SP kit DNA tissue (SP-DT)

Genomic DNA Extraction from Gonococcal Bacteria (Neisseria gonorrhoeae)

Protocol

Suspension of bacteria harvested from liquid medium after culture or agar medium

↓ 5,000 x g, 5 min → Remove supernatant

Pelleted bacteria (about 5 mg of wet bacterial cell)

↓ ← MDT : 180 µl
← EDT : 20 µl

Suspend bacteria well by pipetting so as not to leave bacteria agglomerates
Incubate at 55°C : 15 min*1

↓ ← LDT : 180 µl

Vortex (maximum speed) : 15 sec
Flash spin down

↓

Incubate at 70°C : 10 min
Flash spin down

↓ ← >99% ethanol : 240 µl

Vortex (maximum speed) : 15 sec
Flash spin down

↓

Lysate

↓

Transfer all contents of the micro tube into the cartridge of QuickGene

↓

Refer to the extraction protocol of the device used.
QuickGene-810 to p.4-3
QuickGene-Mini80 to p.4-10
QuickGene SP kit to p.4-17

↓

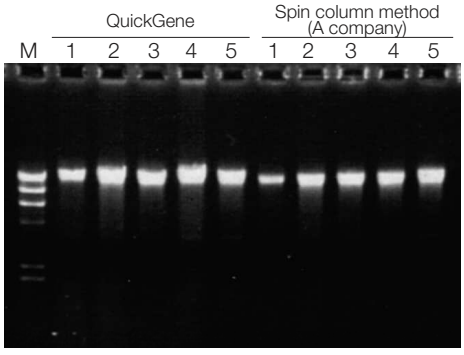
Genomic DNA (Elution volume : 200 µl)

*1 If bacteria agglomerates remain at this time, break them by pipetting and incubate again.

Results

Bacterial strain : Clinical isolates No.1 ～ 5
extracted from about 4.5 ～ 6 mg of each wet fungi

Electropherogram



Electrophoresis condition : 1.5% agarose / 1 x TAE

M : λ -*Hin*d Ⅲ
1 : Bacterial strain No.1
2 : Bacterial strain No.2
3 : Bacterial strain No.3
4 : Bacterial strain No.4
5 : Bacterial strain No.5

No decomposition was detected for extracted genomic DNA.

The yield of genomic DNA

sample	No.1	No.2	No.3	No.4	No.5
QuickGene	8.5 µg	7.1 µg	11.2 µg	11.0 µg	7.3 µg
Spin column method (A company)	3.2 µg	6.6 µg	5.8 µg	6.5 µg	4.6 µg

Protein contamination : A260/280

sample	No.1	No.2	No.3	No.4	No.5
QuickGene	1.97	2.06	2.39	2.03	2.04
Spin column method (A company)	2.11	2.05	2.46	2.00	2.05

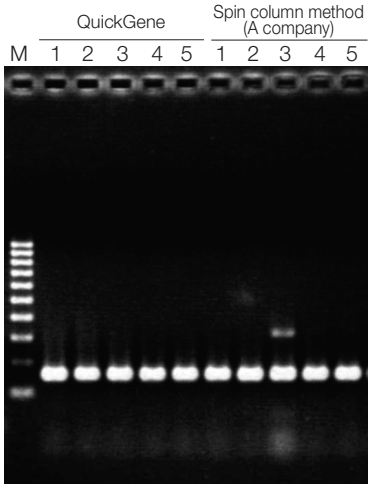
Chaotropic salt contamination : A260/230

No Data

Other

• PCR

ParC gene in subunit of topoisomeraseIV as target of fluoroquinolone antibacterial agent was detected by PCR for genomic DNA extracted using QuickGene system and Spin column method (A company).



Electrophoresis condition : 2% agarose / 1 x TAE

M : 100 bp DNA Ladder
1 : Bacterial strain No.1
2 : Bacterial strain No.2
3 : Bacterial strain No.3
4 : Bacterial strain No.4
5 : Bacterial strain No.5

PCR products were detected for each genomic DNA.

Common protocol is usable for the following

Helicobacter pylori, Pseudomonas aeruginosa