



QuickGene

QuickGene Series

Application Guide

Genomic DNA Extraction from *Pseudomonas aeruginosa*

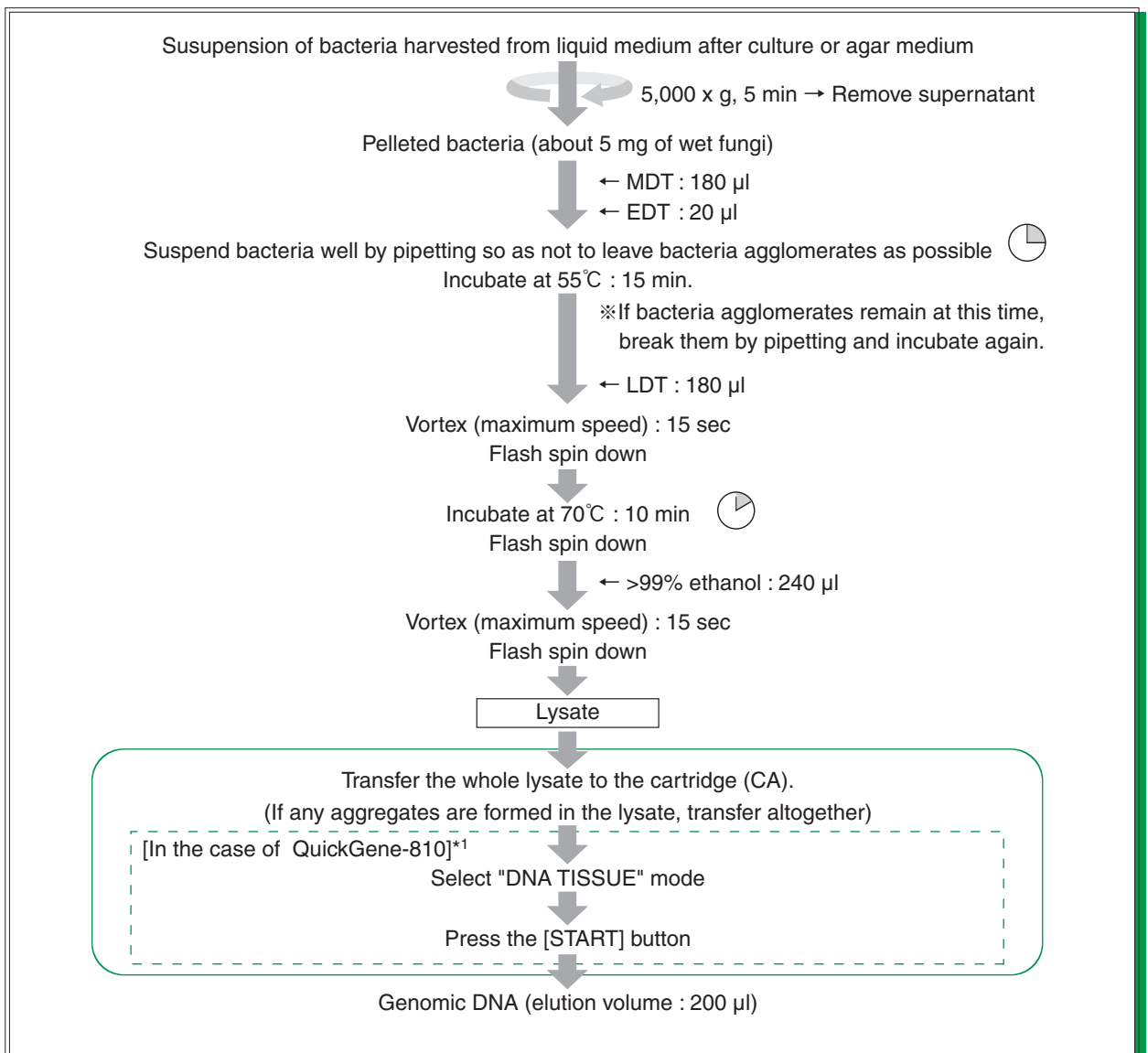
Kit : QuickGene DNA tissue kit S

Model : QuickGene-810 / QuickGene-Mini80

Summary

Enables easy and rapid extraction of genomic DNA from *Pseudomonas aeruginosa*

● Protocol



*1 : In the case of QuickGene-Mini80, please refer to the Kit Handbook for details.

* Perform extraction within 30 min after lysate preparation.

Results : Genomic DNA extraction from *Pseudomonas aeruginosa*

Genomic DNA was extracted from *Pseudomonas aeruginosa* using QuickGene system (QuickGene and QuickGene DNA tissue kit S) and Spin column method (A company).

Bacterial strain
 No.1 : S792 (serotype G)
 No.2 : S728 (serotype G, mucoid strain)
 No.3 : S715 (serotype E)
 No.4 : S1067 (rough strain)

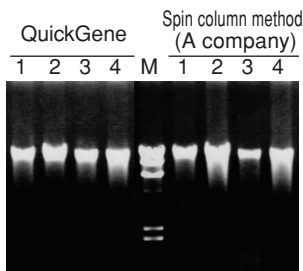
● The yield and purity of genomic DNA

sample	Yield				Purity (A260/280)			
	No.1	No.2	No.3	No.4	No.1	No.2	No.3	No.4
QuickGene	11.4 µg	12.4 µg	10.0 µg	14.0 µg	2.23	1.90	2.31	2.18
Spin column method (A company)	10.8 µg	14.0 µg	7.4 µg	13.0 µg	1.96	1.78	1.93	2.12

The use of QuickGene system enables high-purity genomic DNA extraction with little contamination of protein in good reproducibility regardless of bacterial properties of *Pseudomonas aeruginosa* such as serotypes, mucoid strain, rough strain, etc.

● Electrophoresis of genomic DNA

Electrophoresis was performed with genomic DNA isolated from *Pseudomonas aeruginosa* using QuickGene system and Spin column method (A company).



Electrophoresis condition : 1.5% agarose / 1 x TAE

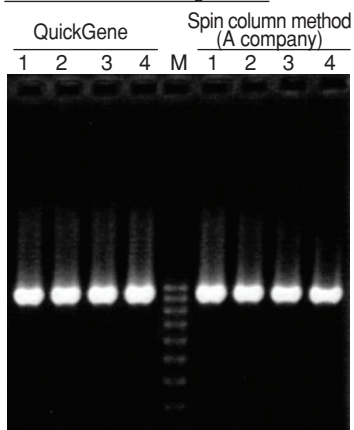
M : λ -Hind III
 1 : No.1 S792 (serotype G)
 2 : No.2 S728 (serotype G, mucoid strain)
 3 : No.3 S715 (serotype E)
 4 : No.4 S1067 (rough strain)

No decomposition was detected for extracted genomic DNA.

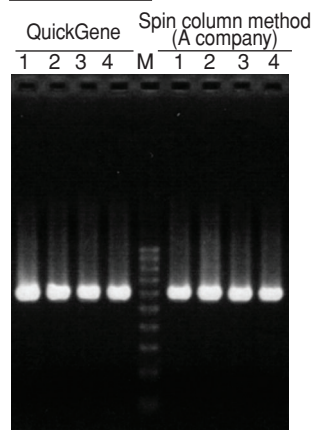
● PCR

16s rRNA gene was detected by PCR with primer characteristic to *Pseudomonas aeruginosa* and that characteristic to *Pseudomonas* genus, for genomic DNA extracted from *Pseudomonas aeruginosa* using QuickGene system and Spin column method (A company).

Pseudomonas aeruginosa



Pseudomonas



Electrophoresis condition : 2% agarose / 1 x TAE

M : 100 bp DNA Ladder
 1 : No.1 S792
 2 : No.2 S728
 3 : No.3 S715
 4 : No.4 S1067

PCR products were detected for each genomic DNA.

* Trademark and exclusion item

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