



QuickGene

QuickGene Series

## Application Guide

## Genomic DNA Extraction from Herpes Simplex Virus-type 1 (HSV-1) Virus Solution

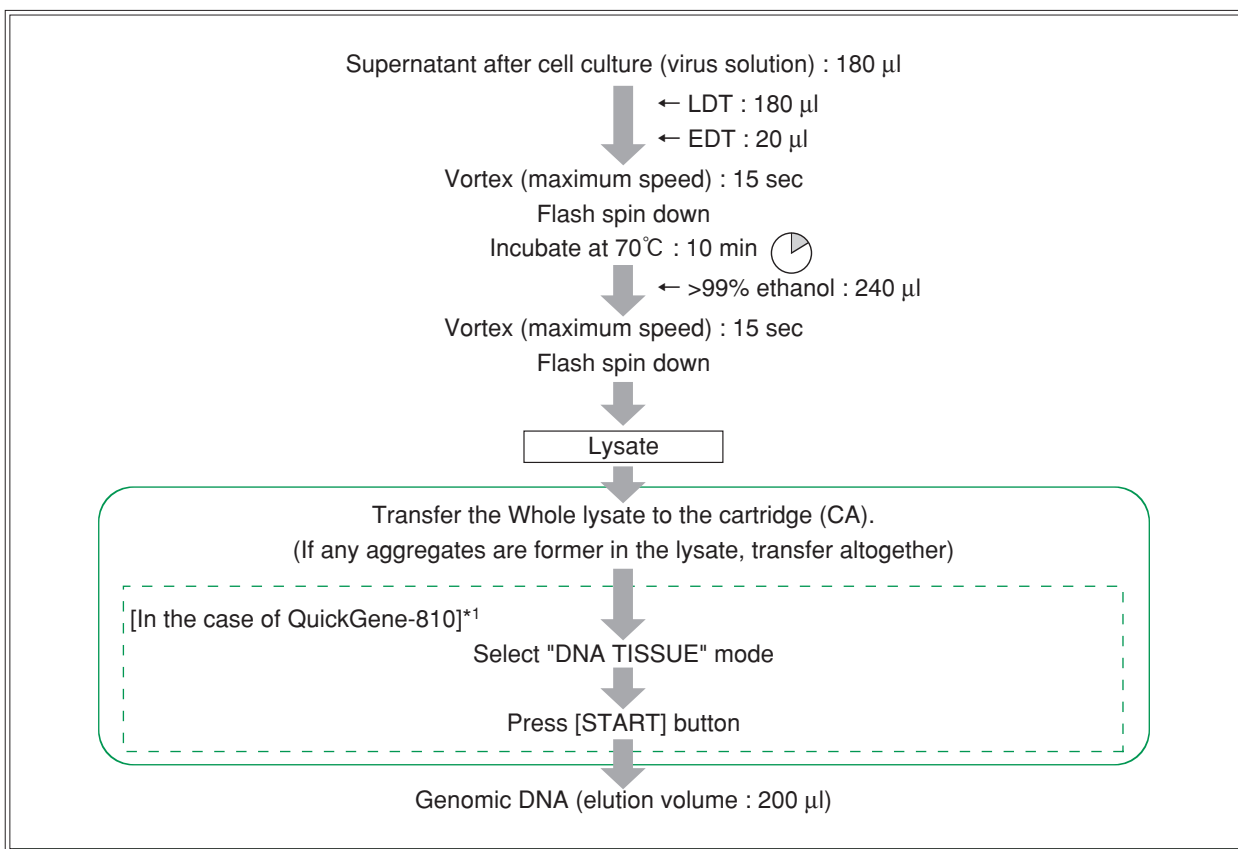
Kit : QuickGene DNA tissue kit S

Model : QuickGene-810 / QuickGene-Mini80

### Summary

Enables easy and rapid genomic DNA extraction from herpes simplex virus-type 1 (HSV-1) virus solution.

### ● 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 HSV-1 virus solution

Genomic DNA was extracted from HSV-1 virus solution using QuickGene system (QuickGene-800 and QuickGene DNA tissue kit S) and Spin column method (A company).

The supernatant of culture medium of vero cells infected by the following viral strain was used as virus solution. Vero cells were cultured in DMEM added with 10%FBS.

Viral strain	No.1 : VR3 (wild strain)	about 10 <sup>8</sup> pfu/ml
	No.2 : d41 (UL41 defective mutant)	about 10 <sup>7</sup> pfu/ml
	No.3 : d13 (UL13 defective mutant)	about 10 <sup>7</sup> pfu/ml

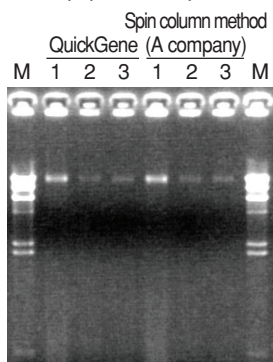
### ● The yield and purity of genomic DNA

Sample	Yield			Purity(A260/280)		
	No.1	No.2	No.3	No.1	No.2	No.3
QuickGene	324 ng	32 ng	51 ng	2.23	2.01	2.14
Spin column method (A company)	351 ng	36 ng	40 ng	1.98	2.41	1.92

The use of QuickGene system enables high-purity genomic DNA extraction with little contamination of protein in good reproducibility and in yield almost equivalent to that by spin column method.

### ● Electrophoresis of genomic DNA

Electrophoresis was performed with genomic DNA extracted from HSV-1 using QuickGene system and Spin column method (A company).



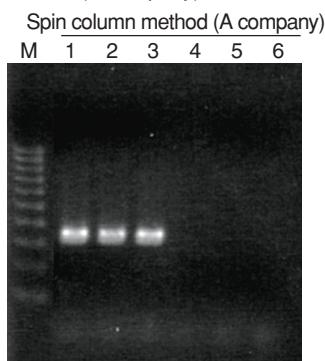
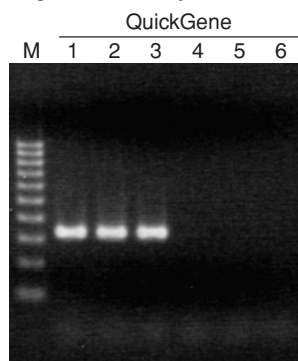
Electrophoresis condition : 1.5% agarose / 1 x TAE

M :  $\lambda$  -Hind III  
 1 : No.1 VR3 (wild strain)  
 2 : No.2 d41 (UL41defective mutant)  
 3 : No.3 d13 (UL13 defective mutant)

No decomposition was detected for extracted genomic DNA.

### ● PCR

HSV-1 gene was detected by PCR with HSV-1 specific primer and HSV-2 specific primer for genomic DNA extracted from HSV-1 using QuickGene system and Spin column method (A company).



Electrophoresis condition : 2% agarose / 1 x TAE

M : 100 bp DNA Ladder  
 1 : No.1 VR3/HSV-1 primer  
 2 : No.2 d41/HSV-1 primer  
 3 : No.3 d13/HSV-1 primer  
 4 : No.1 VR3/HSV-2 primer  
 5 : No.2 d41/HSV-2 primer  
 6 : No.3 d13/HSV-2 primer

PCR products were detected for each genomic DNA.

#### \* Trademark and exclusion item

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