

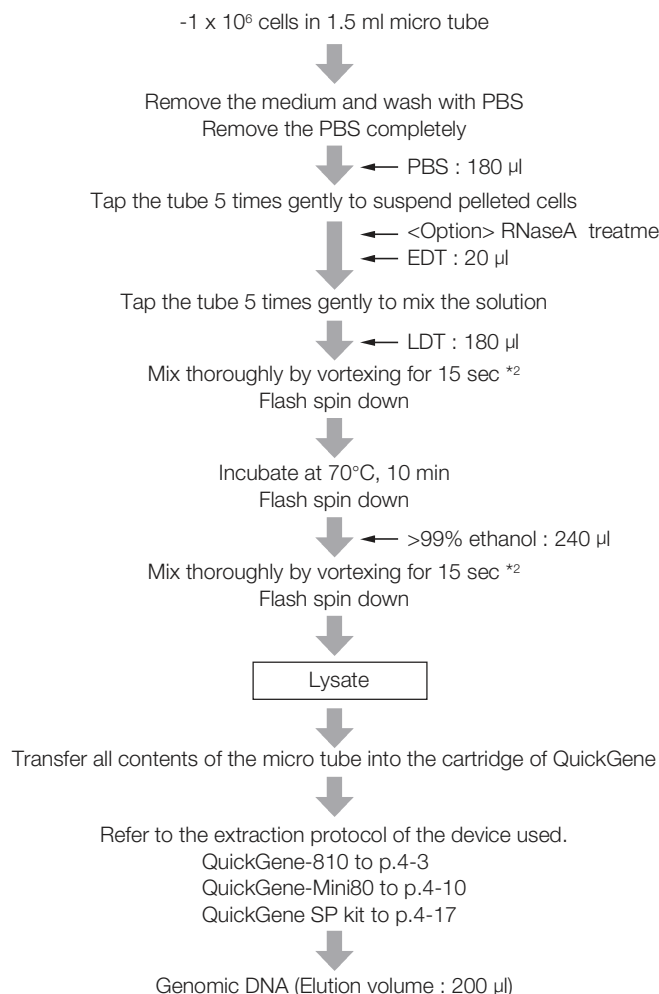
## Chapter 3-VIII

### Genomic DNA Extraction from Cultured Cell

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## Genomic DNA Extraction from Cultured HepG2 Cell of Human

### Protocol



\*1  
RNaseA : 20 μl  
Tap the tube 5 times gently to mix the solution  
Flash spin down  
Set it down at room temperature for 2 min

\*2 Mix completely by vortexing at the maximum speed.  
If the mixing is not enough by vortexing, use the tapping, pipetting or inverting.

### Results

#### Electropherogram

No Data

#### The yield of genomic DNA

Number of HepG2 cells	Yield(μg)
$5 \times 10^5$ cells	5.2

#### Protein contamination : A260/280

Number of HepG2 cells	A260/280
HepG2	1.7

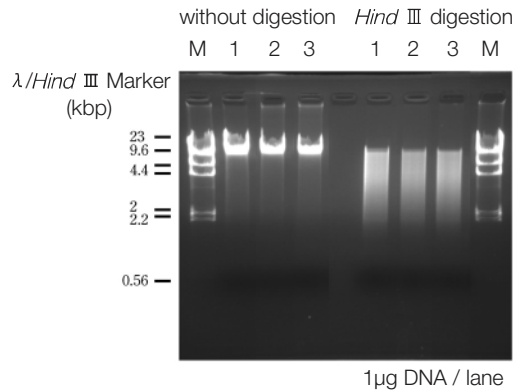
#### Chaotropic salt contamination : A260/230

No Data

## Other

### • Restriction Enzyme Digestion

AGE of *Hind* III restriction enzyme digestion fragments of genomic DNA extracted from several cell lines using QuickGene isolation system and reagents



Isolated genomic DNA with QuickGene-810 (automatic nucleic acid isolation system) and QuickGene DNA tissue kit S, had been digested with *Hind* III successfully.

M :  $\lambda$ /*Hind* III digest

1 : Genomic DNA from HepG2 cell line ( $0.5 \times 10^6$  cells)

2 : Genomic DNA from Huh6 cell line ( $0.5 \times 10^6$  cells)

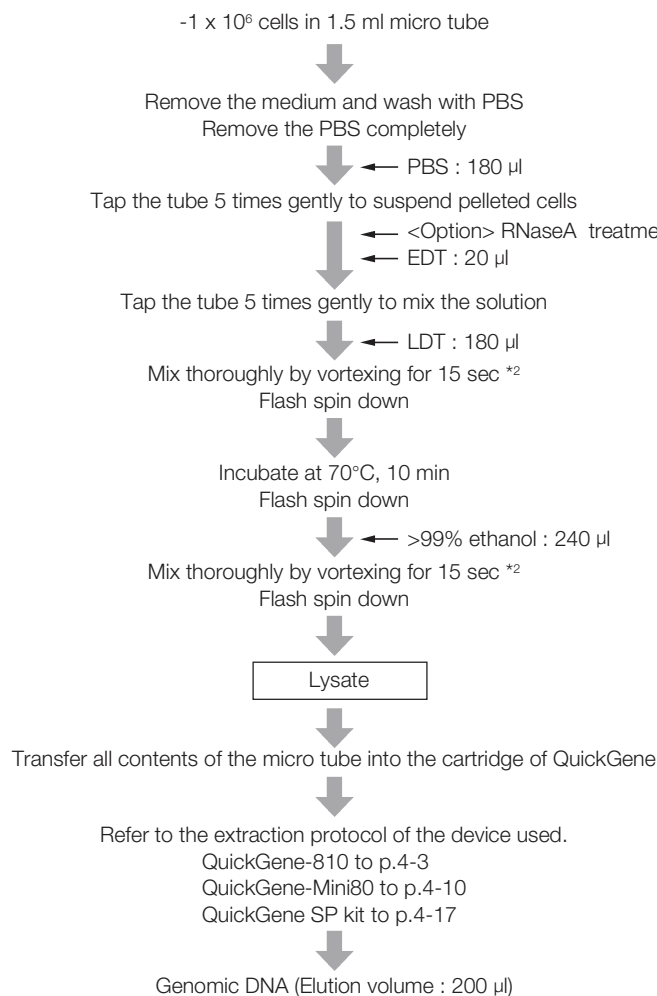
3 : Genomic DNA derived from Huh6 cell line ( $0.5 \times 10^6$  cells)

## Common protocol is usable for the following

Rat Cultured PC-12 Cell, Mouse Cultured ES Cells

# Genomic DNA Extraction from Cultured Huh6 Cell of Human

## Protocol



\*1  
 RNaseA : 20 μl  
 Tap the tube 5 times gently to mix the solution  
 Flash spin down  
 Set it down at room temperature for 2 min

\*2 Mix completely by vortexing at the maximum speed.  
 If the mixing is not enough by vortexing, use the tapping, pipetting or inverting.

## Results

### Electropherogram

No Data

### The yield of genomic DNA

Number of Huh6 cells	Yield(μg)
Huh6	7.6
Derived from Huh6	6.6

### Protein contamination : A260/280

Number of Huh6 cells	A260/280
Huh6	1.8
Derived from Huh6	1.7

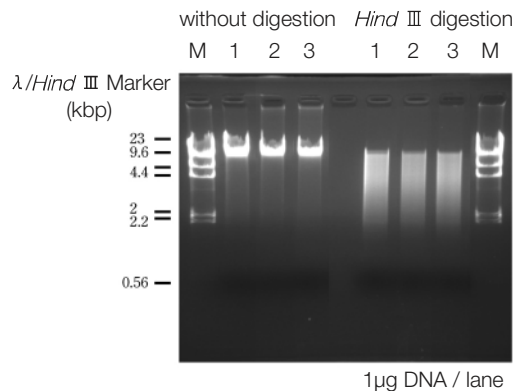
### Chaotropic salt contamination : A260/230

No Data

## Other

### • Restriction Enzyme Digestion

AGE of *Hind* III restriction enzyme digestion fragments of genomic DNA extracted from several cell lines using QuickGene isolation system and reagents



Isolated genomic DNA with QuickGene-810 (automatic nucleic acid isolation system) and QuickGene DNA tissue kit S, had been digested with *Hind* III successfully.

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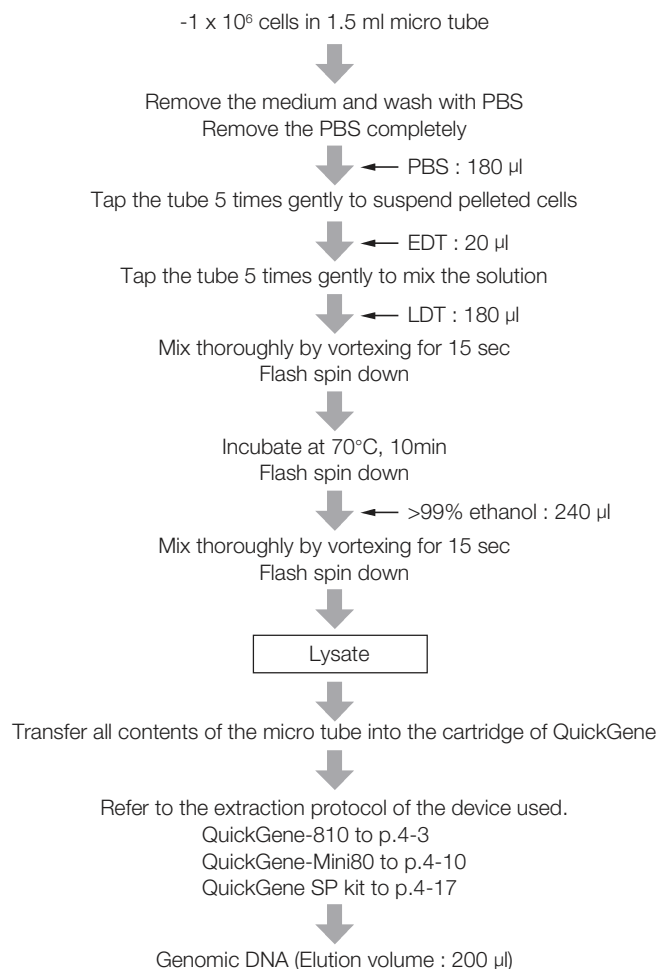
3 : Genomic DNA derived from Huh6 cell line ( $0.5 \times 10^6$  cells)

## Common protocol is usable for the following

Rat Cultured PC-12 Cell, Mouse Cultured ES Cells

## Genomic DNA Extraction from Cultured ES Cells of Mouse

### Protocol



### Results

#### ■ Electropherogram

No Data

#### ■ The yield of genomic DNA

Number of ES cells	Yield(μg)
1 × 10 <sup>5</sup> cells	about 1.0

#### ■ Protein contamination : A260/280

No Data

#### ■ Chaotropic salt contamination : A260/230

No Data

#### ■ Other

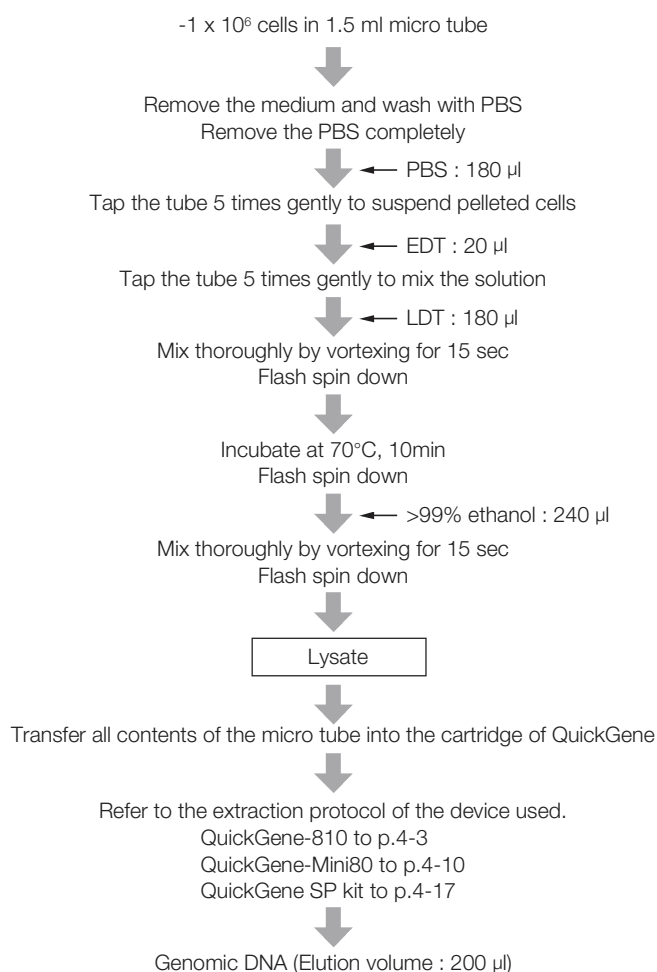
No Data

### Common protocol is usable for the following

Human Cultured Cell Line, Rat Cultured PC-12 Cell

## Genomic DNA Extraction from Cultured PC-12 Cells of Rat

### Protocol



### Results

#### ■ Electropherogram

No Data

#### ■ The yield of genomic DNA

Number of PC-12 cells	Yield(µg)
1 × 10 <sup>6</sup> cells	about 15.0

#### ■ Protein contamination : A260/280

Number of PC-12 cells	A260/280
1 × 10 <sup>6</sup> cells	1.45

#### ■ Chaotropic salt contamination : A260/230

No Data

#### ■ Other

No Data

### Common protocol is usable for the following

Human Cultured Cell Line, Mouse Cultured ES Cells







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