



QuickGene Series **Application Guide**

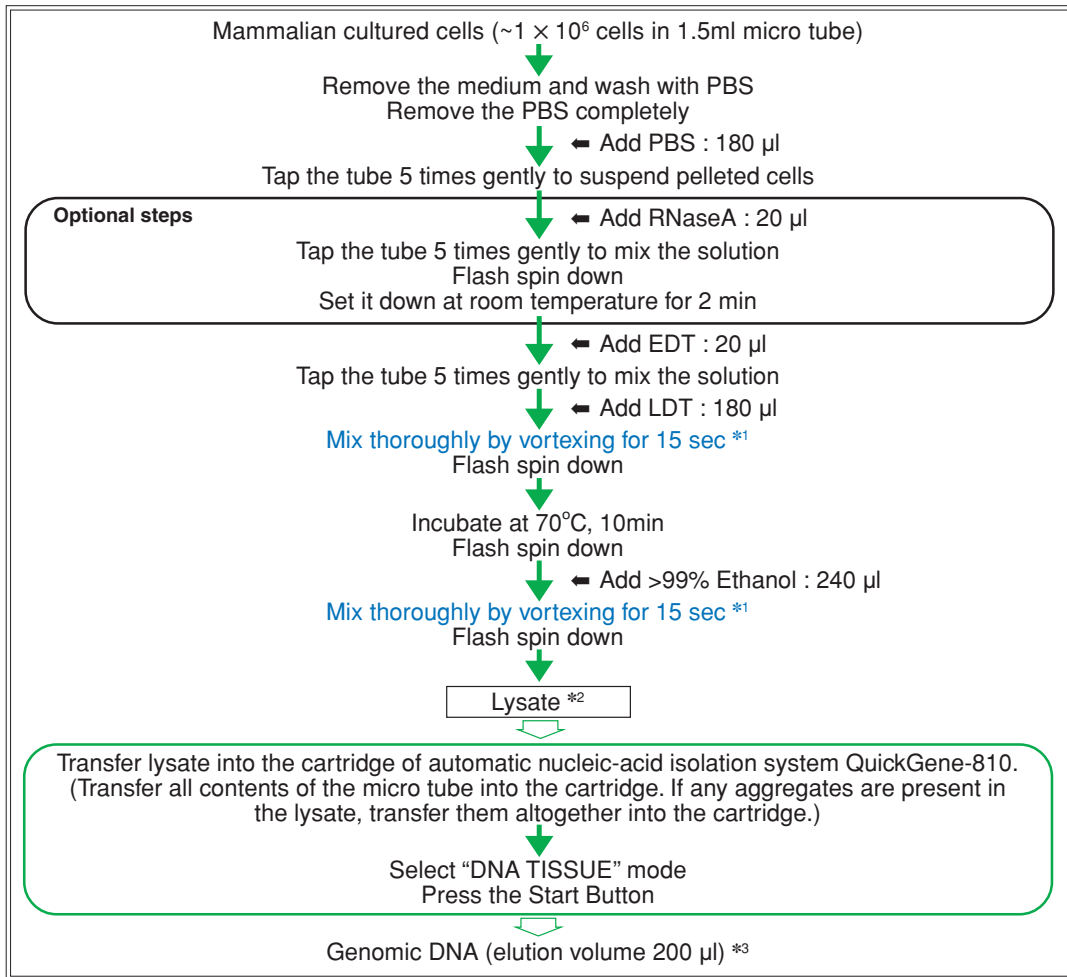
Genomic DNA Isolation from Human Cultured Cell Line
QuickGene DNA Tissue Kit S

Features

- Simultaneously extracts genomic DNA from 8 sets of Lysate in only 13 minutes
- Sophisticate genomic DNA isolation system without centrifugation
- Safety operation without using hazardous solvent such as phenol
- High purity genomic DNA isolation, uncontaminated protein and chaotropic salt

Protocol

● **Genomic DNA isolation from Cultured Cell Line**



*1 : Mix completely by vortexing at the maximum speed.
If the mixing is not enough by vortexing, use the tapping, pipetting or inverting.
*2 : Transfer the lysate into the cartridge within 30 min.
*3 : This elution volume is initial value of "DNA TISSUE" mode.

Results : Genomic DNA isolation from Cultured Cell Line

● The yield of genomic DNA (Sample: 0.5×10^6 cells of cultured cell)

Cell Line	Yield(μ g)
HepG2	5.2
Huh6	7.6
Derived from Huh6	6.6

The use of QuickGene-810 (automatic nucleic-acid isolation system) and QuickGene DNA tissue kit S enables the high-yield isolation of genomic DNA from cultured cells.

● The purity of Genomic DNA (determination of protein contamination) : $A_{260/280}$

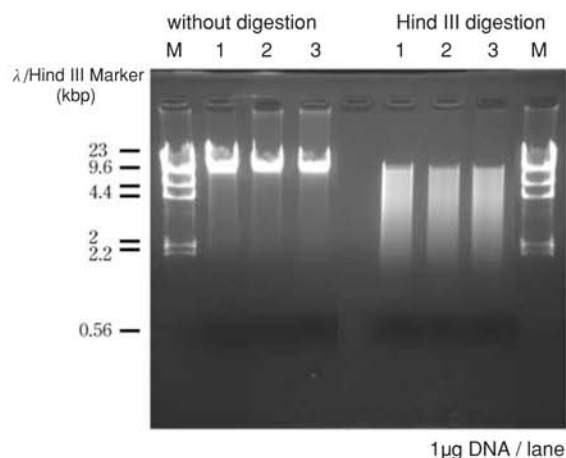
Cell Line	$A_{260/280}$
HepG2	1.7
Huh6	1.8
Derived from Huh6	1.7

$A_{260/280}$: The ratio indicates the quality of nucleic acid from protein contamination ($A_{260/280} > 1.8$).
(Protein contamination decreases the ratio.)

The use of QuickGene-810 (automatic nucleic-acid isolation system) and QuickGene DNA tissue kit S enables the isolation of high-purity genomic DNA with little protein contamination.

● 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 : λ /DNA/Hind III digest
1 : Genomic DNA from HepG2 cell line (0.5×10^6 cells)
2 : Genomic DNA from Huh6 cell line (0.5×10^6 cells)
3 : Genomic DNA derived from Huh6 cell line (0.5×10^6 cells)

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