

Nucleic Acid Isolation System

QuickGene-610L

For Genetic Analyses Of Blood Samples



Smart Purification Tool for Genetic

The QuickGene-610L can perform DNA isolation of 6 whole blood samples simultaneously.
High throughput in routine analytical work on demand.

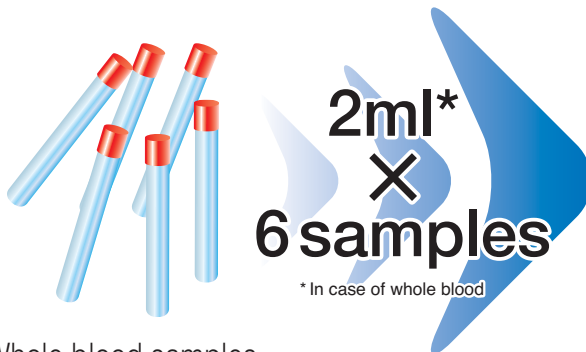
QuickGene-610L Nucleic Acid Isolation System is semi-automated, optimized for genetic research.

STEP 1: Large-scale Analysis

1 Process valuable samples simultaneously

To obtain sufficient volume of DNA samples from whole blood efficiently is critical for further genome analyses. QuickGene-610L has the capacity to process 6 samples of 2 ml each simultaneously at your convenience. This unit can prepare large volumes of samples in shorter time with reproducible results.

Sample



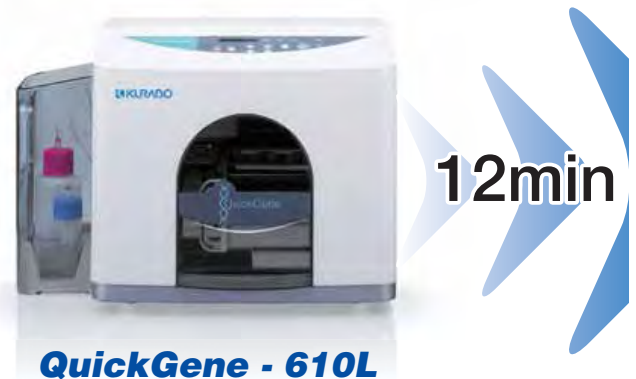
Whole blood samples

STEP 2: Quick Isolation

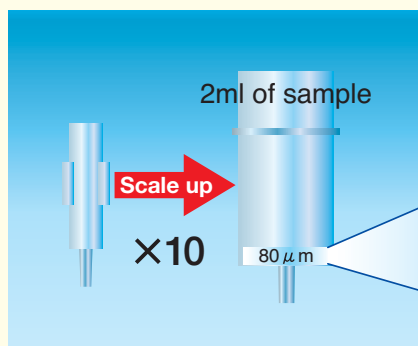
2 6 samples within 12 min

QuickGene-610L employs proprietary porous membrane for the separation. The membrane is made of an ultra-thin 80µm-thick polymer, which enables quick purification from larger volume samples under low pressure. Two milliliters of whole blood samples can be processed in 12 minutes to yield the DNA samples from whole blood lysate, when a sample is pre-treated with a QuickGene Isolation Kit.

Isolation

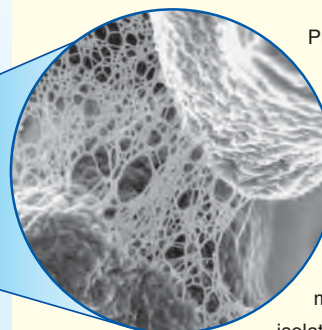


Scale up for Genetic Research Studies



A novel cartridge of QuickGene-610L enables the processing of a large volume of samples, ten times (×10) more than QuickGene-810 cartridges, for nucleic acid isolation.

Revolutionary Porous Membrane



Proprietary 80µm thick porous membrane of the cartridge effectively absorbs nucleic acids in hydrophobic solvents, separating from proteins and lipids. The integration achieves stable and reproducible membrane separation-isolation performance.

Analysis Research

blood samples (2ml each), within 12 min.

For research use only

Genetic analyses of blood samples.

STEP 3: Quality Evaluation

- 3** Mild isolation provides DNAs of higher quality, fewer cleavages.

The high quality of purified DNA samples is critical to successful research studies. Especially in the case of studies involving many genetic markers, high-purity, fewer-cleaved, and ample DNA samples are required. QuickGene-610L yields DNA samples under gentle isolation method, not by conventional centrifuge process, resulting in higher yields of DNA with higher molecular weight, fewer cleavages, and high purity.

Analysis

STEP 4: No Separate Purification Process

- 4** The DNA samples are suitable for downstream genetic analyses.

DNA samples isolated by QuickGene-610L require no further purification process. Then isolated DNA can be directly applied to genetic analyses including PCR, SNP validation. In other words, it simplifies the routine analytical work flow, and results in high throughput processes.

Results

Fewer-cleaved, High-purity

Genomic DNA 50µg*

*Yield may vary according to samples.

PCR

DNA Sequencer

Real Time PCR

DNA Microarrays

Sequencing

Genotyping

SNP Validation

Genetic Analysis

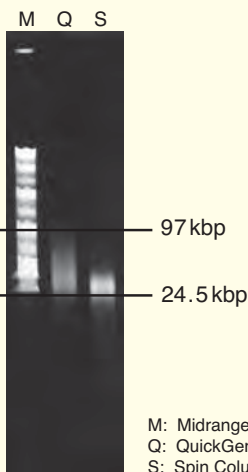
Linkage Analysis

Cancer Research

Genetic Disease

HLA Typing

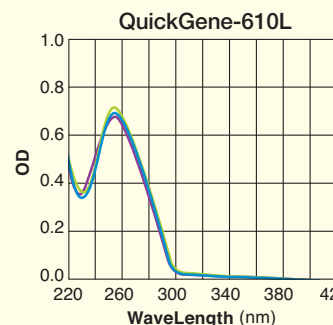
Longer DNA Samples



DNA isolated by QuickGene has remarkable lengths of 97 kbp through its gentle separation process under low pressure conditions. Traditional spin-column isolation method with a centrifuge has been known to yield shorter DNA fragments than QuickGene due to the cleavage of DNA molecules.

M: Midrange PFG maker II
Q: QuickGene-610L
S: Spin Column

High-purity



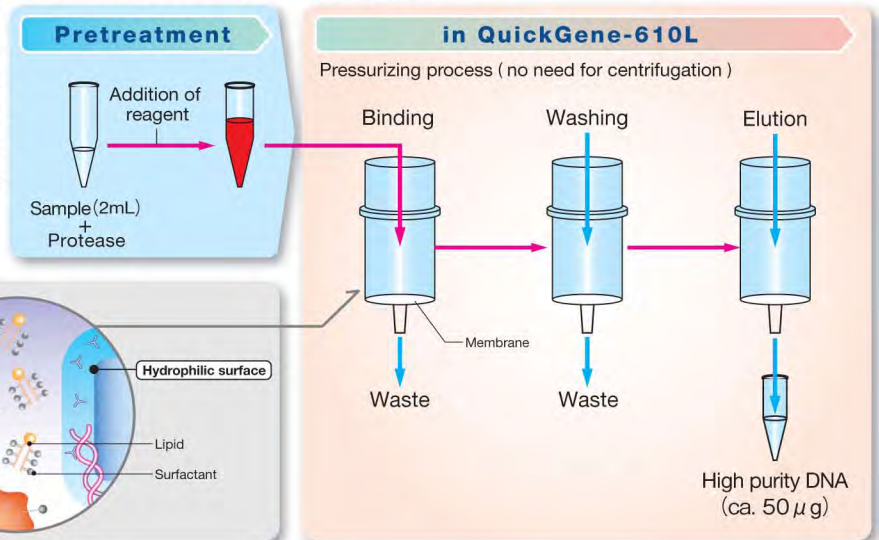
A spectrum of DNA sample purified by QuickGene-610L

DNA samples obtained by QuickGene-610L is of such high quality that the purification process is not required to remove proteins and chaotropic salts and can be directly submitted to analysis such as PCR, etc.

High purity and high yield without centrifugation

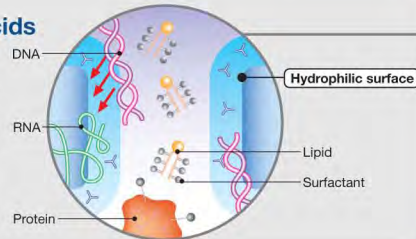
Three pressurizing stages-binding, washing and elution-occur automatically in the unit. Because of the outstanding adsorptive and desorptive properties of the membrane, high-purity nucleic acid can be obtained easily at low pressure without any complex processes such as centrifugation.

■ Isolation of DNA from whole blood



■ Adsorption of nucleic acids

Owing to their hydrophilic properties, nucleic acids get adsorbed onto the membrane, while proteins and lipids, which are comparatively hydrophobic, tend to seep out of the membrane.



Isolation Kits for QuickGene-610L

QuickGene DNA whole blood kit L

QuickGene isolation kit (for 48 samples) contains all reagents and tubes necessary for DNA isolation from whole blood in a single package.

| | QuickGene isolation kit (for 48 samples) |
|---------------------|--|
| | QuickGene DNA whole blood kit L |
| | Reference code DB-L |
| Pretreatment enzyme | <input type="checkbox"/> |
| Lysis buffer | <input type="checkbox"/> |
| Wash buffer | <input type="checkbox"/> |
| Elution buffer | <input type="checkbox"/> |
| Cartridges | <input type="checkbox"/> |
| Waste tubes | <input type="checkbox"/> |
| DNA Yield | ca, 50µg/whole blood 2ml |



Specifications of QuickGene-610L

Overview

Automated stages: Sample binding, washing, and elution
Throughput: 1 to 6 samples per run
Display: LCD (16 characters x 1 line)

Operating conditions

Supply voltage: 100 ~ 240V
Power supply frequency: 50/60Hz
Operating conditions: Temperature: 15 - 30°C
Humidity: 30 - 80% (non-condensing)
Power consumption: 100W

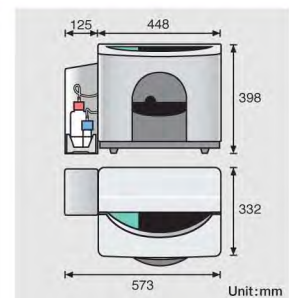
Physical specifications

Dimensions: 573(W) × 332(D) × 398(H) mm
Weight: approx. 24kg

Isolation kit

QuickGene DNA whole blood kit L (for 48 samples)

For research use only



Application Guides Available on our website. ▶ <http://www.kurabo.co.jp/bio/English/>



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