

Compact nucleic acid isolation device for large volume sample, Mini-size but High-capacity

QuickGene-Mini8L is a compact system requiring no centrifugation in the isolation process, giving less strain to samples and enabling rapid nucleic acid isolation. DNA can be easily isolated from various large scale samples including whole blood/ tissue/ plants and others.

Compact design

- The small, light weight QuickGene-Mini8L takes up minimal space on the lab bench and even in the clean bench.
- No need to move the samples from the lab bench without centrifugation throughout the whole isolation process.



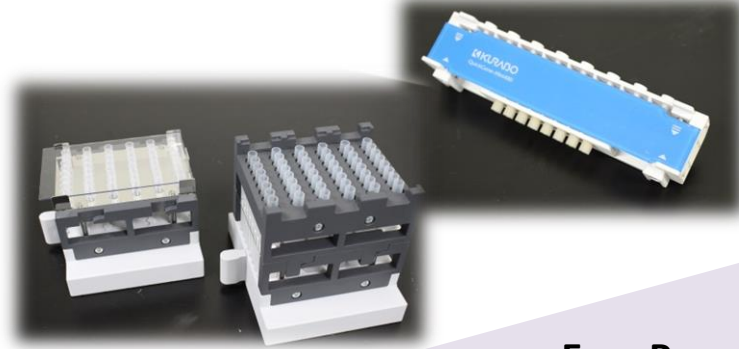
Small to Large volume sample in 1 compact device

- QuickGene-Mini8L is usually for DNA isolation from large volume sample (ex. 2 ml of whole blood, 100 mg of mice liver). In case of using optional pressure adaptor and holder unit, it becomes possible to isolate DNA/RNA from small volume sample (ex. 200 µl of whole blood, 10 mg of mice liver).

Large volume sample



Small volume sample



Large scale Analysis

To obtain sufficient volume of DNA samples from various samples efficiently is critical for further genome analysis. QuickGene-Mini8L has the capacity to process 8 samples of 2 ml each simultaneously at your convenience. This unit can prepare large volumes of samples in shorter time with reproducible results.

2 ml of
Whole blood

100 mg of
Mouse liver

Saliva

500 µl of
Buffy coat

Swab
suspension

etc.

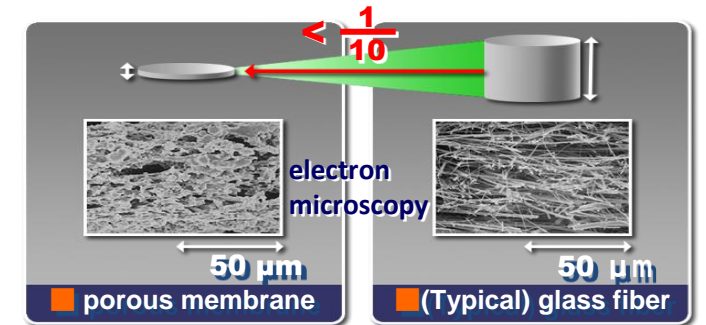
Sample pre-treatment is quite easy by QuickGene specific isolation kit. After applying the lysate to the cartridge, QuickGene-Mini8L add the gentle air pressure and get fewer cleaved DNA.

And it is not needed to get out the cartridges from the device during DNA adsorption, washing and elution steps. It helps you not to take samples mistake.



Revolutionary Porous Membrane

- The QuickGene-Mini8L uses patented porous membrane less than 100 µm thick.
- Depending on the outstanding adsorption/desorption performances of the membrane, high-purity nucleic acid can be easily obtained in high yield at low pressure.
- The ultra thin membrane enables nucleic acid isolation in shorter time than when compared to glass fiber membranes.



Porous membrane

High Quality

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-Mini8L 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. The isolated DNA can be directly applied to genetic analysis including PCR, SNP validation, NGS.

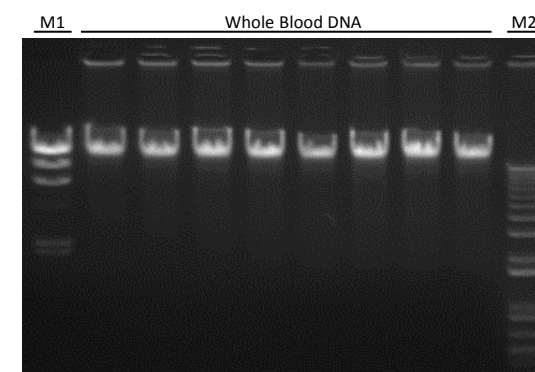
Fewer Cleaved

High Yield

DNA

High Purity

Fewer Cleaved DNA



DNA Yield (µg)	49.85
Purity (280/260)	1.89
Purity (230/260)	1.85
DNA length	Approx. 100 kbp

M1: A HindIII marker
M2: 1 kb marker
Fresh human whole blood (Leukocyte: 4.5x10³ cells/µl)
N=8

Various Applications of Specific Isolation Kit

QuickGene specific isolation kit can be used for isolation from not only intracellular DNA but also circulating cell-free DNA (ccfDNA) in plasma.

In many cases, specific kit for plasma ccfDNA isolation is needed to get ccfDNA from plasma. But QuickGene system don't need specific plasma kit and it is possible to apply DNA whole blood kit for plasma sample. It cuts off the cost for the additional kits.

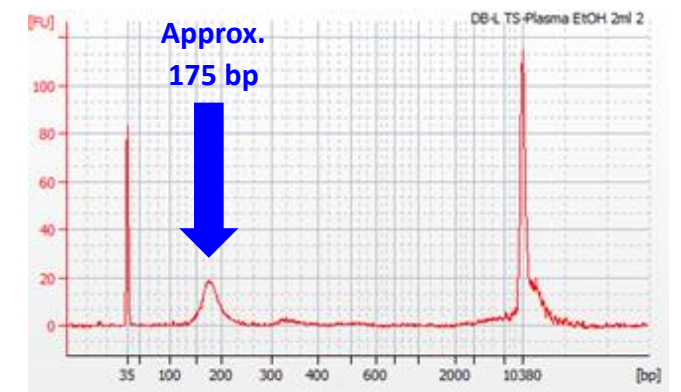
ccfDNA isolation from plasma

ccfDNA isolation from human plasma with QuickGene DB-L kit

<Analysis of isolated DNA>

System; Agilent Bioanalyzer 2100

Kit; Agilent Bioanalyzer High Sensitivity DNA kit

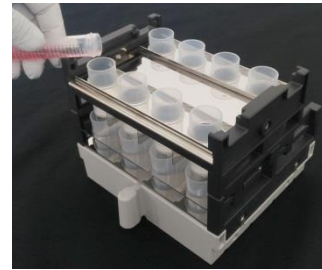


Yield of 133 - 233 bp DNA (ng) 12.2

QuickGene DB-L kit complete ccfDNA isolation from plasma by quick and easy processing.



Pre-treatment



Apply lysate



Set pressure seal plate

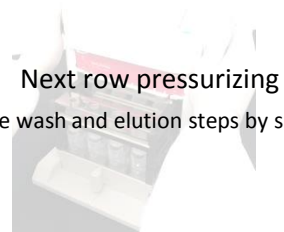


Set (Waste tube/cartridge) holder



Turn Rotary Switch to pressurize the first row

Next row pressurizing
Complete wash and elution steps by same way..



Specific Isolation Kits and Options

- QuickGene isolation kits are optimized for the system to isolate DNA in the shortest time and with the highest quality.
- Environmentally friendly isolation can be conducted without using hazardous organic solvents.

Samples	Isolation kits	Reference code	Isolation examples
Human/Animal whole blood, Buffy coat, Plasma	DNA whole blood kit L	DB-L [For 48 samples]	Approx. 50 µg / 2 ml of whole blood
Animal tissue, Plants, Insects, Fish and Shellfish, Cheek swab, Paraffin-embedded samples, Cultured cells, Bacteria, Virus, Materials, manufactured goods	DNA tissue kit L	DT-L [For 48 samples]	Approx. 80 µg / 100 mg of mouse liver

*The kits are not supplied with QuickGene-Mini8L. Select the desired kit(s) and order it(them) separately.

Optional Products	Reference Code	Content
QuickGene-Mini480 Adapter Set	QG-Mini480 AD set	Cartridge holder, Waste tube holder, Collection tube holder, Pressure adapter, Pressure seal plate, Separator, Pressure head

QuickGene-Mini8L specifications

Overview

- Throughput: 1 to 8 samples per run

Physical specifications

- Dimensions: 280(W)x260(D)x300(H) mm
- Weight: Approx. 3.3 kg

Physical specifications

- Supply voltage : AC100~240V
- Power supply frequency: 50/60 Hz
- Operating conditions : Temperature: 15~30°C
: Humidity: 30~80% (non-condensing)

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Nucleic acid isolation system

QuickGene-Mini8L

Mini for Large

