KURABO

autogen

Nucleic Acid Isolation System

QuickGene-Mini80

One For Each Person

QuickGene

Personal nucleic acid isolation device, one for

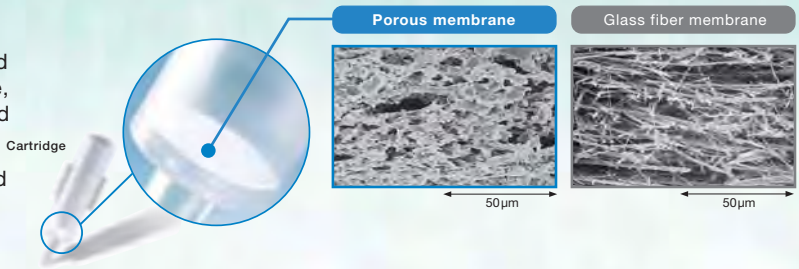
QuickGene-Mini80 is a compact system requiring no centrifugation in the isolation process, giving less strain to samples and enabling rapid nucleic acid isolation. DNA/RNA can be easily isolated from various samples including whole blood/tissue/cells/plants/virus and others. The QuickGene-Mini80 shares a common isolation mechanism and kits with our semi-automated nucleic acid isolation system, QuickGene-810. QuickGene-Mini80 offers high performance comparable to QuickGene-810 at a reasonable price.

Compact Design

- The small, lightweight QuickGene-Mini80 takes up minimal space on the lab bench and is easy to carry.
- QuickGene-Mini80 can be operated on the lab bench so, without moving around, the user can perform nucleic acid isolation.

Revolutionary Porous Membrane

- The QuickGene-Mini80 uses patented porous membrane only 80μm thick.
- Because of the outstanding absorptive and desorptive 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.

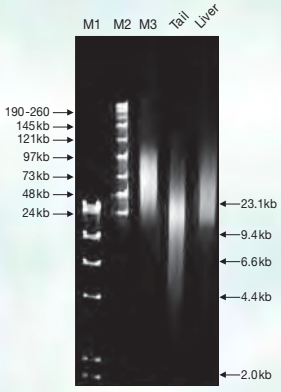


High Purity, High Yield

- Highly reproducible QuickGene-Mini80 can stably isolate nucleic acid in high yield.
- The isolated DNA/RNA contains few impurities and can be used directly in PCR and RT-PCR.

Length of isolated DNA

QuickGene DNA tissue kit S

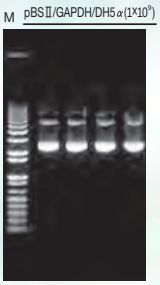


M1:λ*Hind* Ⅲ digest
M2:MidRange PFG Marker Ⅱ
M3:Mouse Genomic DNA(BD)

*Balb/c mouse (female, 7week old)

Isolation of plasmid DNA

QuickGene Plasmid kit SⅡ



M :1kb PLUS DNA Ladder

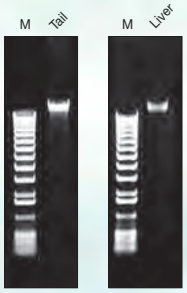
■Yield and purity of plasmid DNA

	Average*
DNA yield(μg)	23.0
Purity(260/280)	1.97
Purity(260/230)	2.28

*Average of 4 samples

Isolation of DNA from tissue

QuickGene DNA tissue kit S



M :1kbp PLUS DNA Ladder

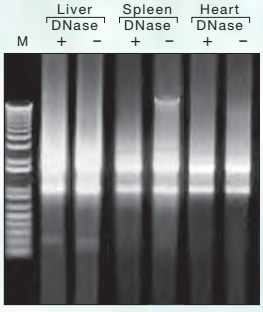
■Yield and purity of genomic DNA

	Tail	Liver
DNA yield(μg)	4.0	3.6
Purity(260/280)	1.916	1.925
Purity(260/230)	2.117	1.942

*Balb/c mouse (female, 7week old)
*Without RNase treatment

Isolation of RNA from tissue

QuickGene RNA tissue kit SⅡ



M :1kbp PLUS DNA Ladder

■Yield and purity of total RNA

	DNase treatment	Liver 32mg	Spleen 32mg	Heart 32mg
total RNA yield(μg)	+	155.4	71.8	21.2
	−	159.3	74.3	21.6
Purity(260/280)	+	2.1	2.1	2.2
	−	2.1	2.1	2.2
Purity(260/230)	+	2.3	2.1	2.0
	−	2.2	2.1	1.8

*Balb/c mouse (female, 7week old)

each person

Easy & Rapid Processing

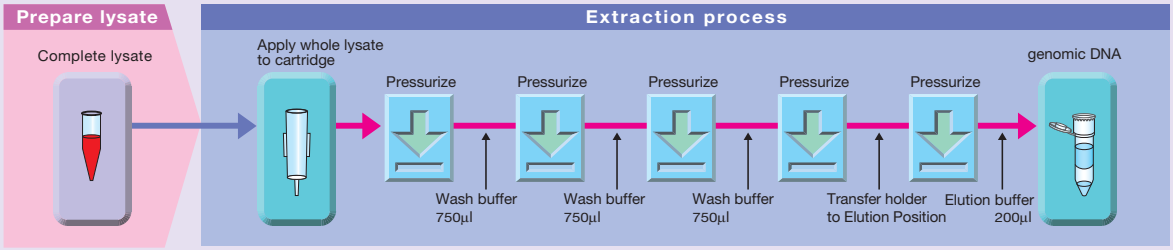
- The operation is simple. Just set the sample and rotate the blue pressurizing Rotary Switch on both sides of the system.
- Centrifugation is not required for the isolation. The operation is simple, and saves valuable time.

Easy and simple isolation operation

*Commercially available microtubes are also usable.

Workflow of isolation using DNA whole blood kit

DNA can be isolated from human whole blood in only 6 min.*
*Represents the actual time required to perform the operation according to our protocols.

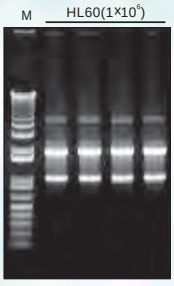


pressurizing process

① Set holder into system
② Rotate pressurizing switch toward the front side to start pressurizing
③ Make sure that there is no residual liquid in the cartridge and return the pressurizing switch to original position
④ Pull out holder from system

Isolation of RNA from cultured cells

QuickGene RNA cultured cell kit S



M :1kbp PLUS DNA Ladder

Yield and purity of total RNA

	DNase treatment	Average*
total RNA yield(µg)	+	12
	–	11.1
Purity(260/280)	+	2.14
	–	2.12
Purity(260/230)	+	2.17
	–	2.25

*Average of 4 samples

Isolation of RNA from cells cultured in 6 cm dish

QuickGene RNA cultured cell HC kit S

M :1kb PLUS DNA Ladder

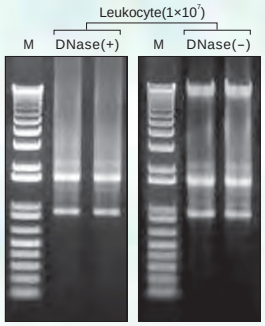
Yield and purity of total RNA

Cell type	HL60	HEK293*	HeLa	COS-7	NIH/3T3
Cell form	Pellet	6cm dish			
total RNA yield(µg)	45.6	110.5	46.9	43.0	34.4
Purity(260/280)	1.99	1.86	2.19	2.07	1.93
Purity(260/230)	2.01	1.98	1.98	1.96	1.91

*HEK293 is the average of 4 samples.

Isolation of RNA from blood cells

QuickGene RNA blood cell kit S



M :1kb PLUS DNA Ladder

Yield and purity of total RNA

Leukocyte(1×10^7)	DNase treatment	Average*
total RNA yield(µg)	+	4.7
	–	5.9
Purity(260/280)	+	2.30
	–	2.10
Purity(260/230)	+	1.29
	–	0.68

*Average of 2 samples

Easy isolation from various samples

Appropriate kit selectable depending on sample.

Isolation example		Purpose	Corresponding kits
Whole blood, buffy coat	Human/ Cow, etc.: Whole blood (EDTA blood, heparin blood)	genomic DNA isolation for genetic test, genotyping	DNA whole blood kit S
Tissue Materials, manufactured goods	Mouse/ Rat: Tail, Sperm, Liver Wheat/ Red bean/ Pleurotaceae/ Shimeji mushroom, etc.	DNA isolation for genome analysis of samples ranging from mouse/ rat to food	DNA tissue kit S
Plasmid	*E. coli*	Miniprep for plasmid	Plasmid kit S Ⅱ
Tissue	Mouse/ Rat: Liver, Kidney, Brain, Spleen, Lung, Heart, Thymus	total RNA isolation for expression analysis such as real-time PCR and RT-PCR	RNA tissue kit S Ⅱ
Cultured cell Tissue	Adherent/ Non-adherent (HeLa, HL60, etc.) Dicotyledonous plant (leaf)/ Tobacco (leaf), Plants	total RNA isolation for expression analysis such as real-time PCR and RT-PCR	RNA cultured cell kit S
Cultured cell	Cultured cell on 6cm/ 10cm dish	High-yield total RNA isolation for northern blotting and microarray	RNA cultured cell HC kit S
Blood cell	Leukocytes separated by ammonium chloride Erythrocytes of whole blood or Ficoll fraction	High-purity total RNA isolation for expression profiling or various applications	RNA blood cell kit S

*This chart shows isolation examples. Protocol may vary depending on samples and sample conditions.

The specific set of isolation kits supports various samples

QuickGene isolation kits are optimized for the QuickGene system to isolate DNA and RNA in the shortest time and with the highest quality. Appropriate kit selectable depending on sample.

Isolation kits			Isolation example
QuickGene DNA whole blood kit S	for 96 samples	Reference code DB-S	ca.5μg / Whole blood 200μl
QuickGene DNA tissue kit S	for 96 samples	Reference code DT-S	ca.4μg / 5mg Balb/c Mouse tail
QuickGene Plasmid kit S Ⅱ	for 96 samples	Reference code PL-S2	ca.12.5μg / 1ml culture pBlueScript Ⅱ / DH5α
QuickGene RNA tissue kit S Ⅱ	for 96 samples	Reference code RT-S2	ca.100μg / 30mg Mouse liver
QuickGene RNA cultured cell kit S	for 96 samples	Reference code RC-S	ca.10μg / 1×10^6cell HL60 cell
QuickGene RNA cultured cell HC kit S	for 96 samples	Reference code RC-S2	90~150μg / 10cm dish cultured HEK293 cell
QuickGene RNA blood cell kit S	for 96 samples	Reference code RB-S	ca.4.5μg / 1×10^7cell Leukocytes

*The isolation kits used in QuickGene-Mini80 are also used for QuickGene-810.

Specifications

Overview

- Throughput : 1 to 8 samples per run

Operating conditions

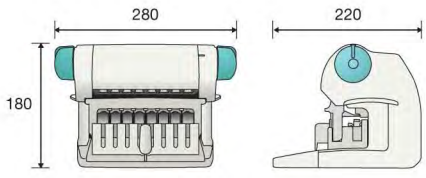
- Supply voltage : AC100~240V
- Power supply frequency : 50 / 60Hz
- Operating conditions : Temperature: 15~30℃
  Humidity: 30~80%(non-condensing)

Physical specifications

- Dimensions : 280(W)×220(D)×180(H)mm
- Weight : Approx. 3kg

*Research use only

unit:mm



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