

Nucleic Acid Isolation System  
**QuickGene-810**  
*DNA/RNA From Varied Samples*



# DNA and RNA isolation with a revolutionary 80 $\mu$ m membrane film

QuickGene-810 rapidly isolates DNA/RNA from varied samples with high quality and high yield.

An automated system with isolation kits for reliable results.



Small and self-contained QuickGene-810 takes up minimal space on the lab bench.



Intelligent QuickGene-810 handles samples automatically and isolates DNA or RNA.



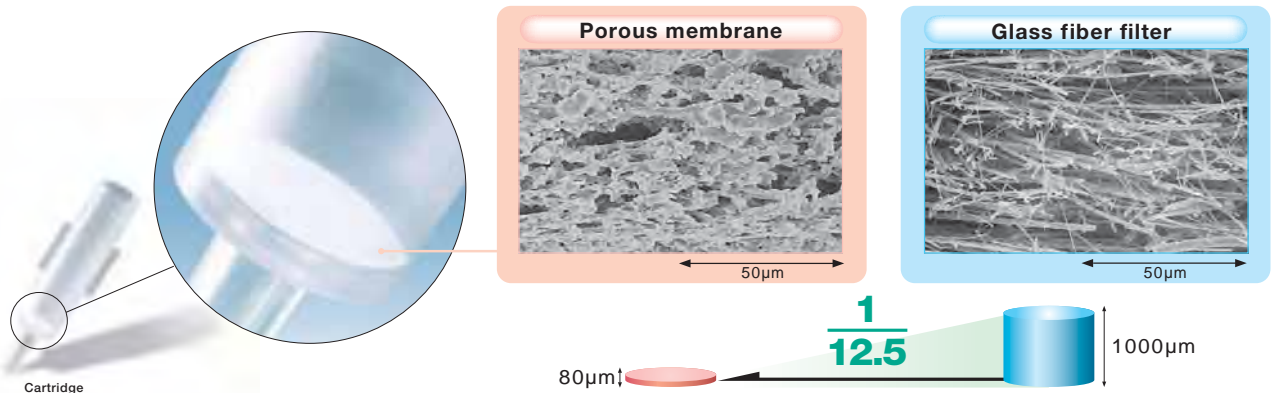
Patented porous membrane makes it possible to extract DNA from eight sets of whole blood samples simultaneously in only six minutes.



KURABO provides several kits for isolating DNA from whole blood and tissue samples and RNA from cultured cells, tissue samples and blood cells.



## Revolutionary porous membrane (Scanning electron microscope photos)



The system uses a porous, highly adsorptive membrane developed through application of advanced polymer membrane production technology. It is only 80 $\mu$ m thick, making it incomparably thinner than conventional glass fibers. QuickGene-810's ultra thin membrane alleviates the risk of contamination from residue in the membrane.

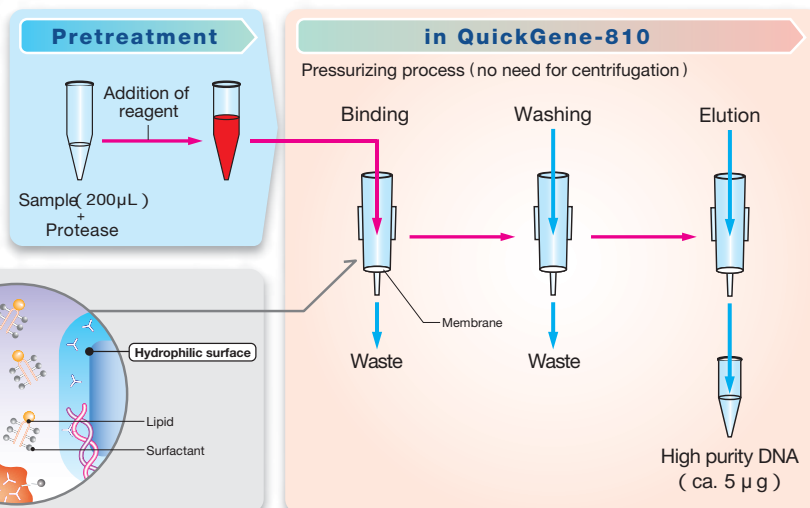
## Easy RNA isolation

Problematic RNA isolation can also be automated with QuickGene-810. RNA is much more unstable than DNA, and ribonuclease in the atmosphere or from the operator during the isolation process has sometimes resulted in its degradation. But there is no risk at all of contamination when you use QuickGene-810 because the isolation process occurs automatically in a sealed, enclosed space.

## High purity and high yield without centrifugation

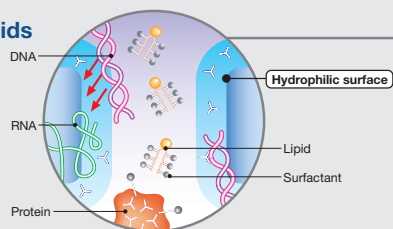
Three pressurizing stages — binding, washing and elution — occur automatically in the unit. Because of the outstanding adsorptive and desorptive properties of the membrane, high-purity nucleic acid can be obtained easily at low pressure.

### 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.



## Processing time (8 samples)

DNA Isolation	
SAMPLE	TIME
WHOLE BLOOD	6 min
TISSUE	13 min

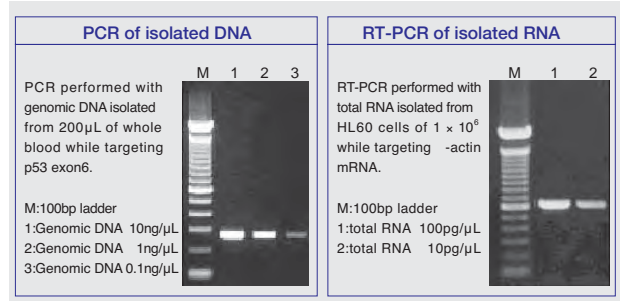
PLASMID DNA Isolation	
SAMPLE	TIME
PLASMID	6 min

RNA Isolation	
SAMPLE	TIME
TISSUE	15 min
CULTURED CELL (adherent / floating)	17 min
CULTURED CELL (6/10cm dish)	11 min
BLOOD CELL	20 min

## High purity

There are almost no impurities in isolated genomic DNA and total RNA. The absence of impurities such as proteins and chaotropic salts means that the isolated products can be used directly in PCR and RT-PCR.

	Purity
DNA	$A_{260}/A_{280} > 1.7$
RNA	$A_{260}/A_{280} > 1.8$

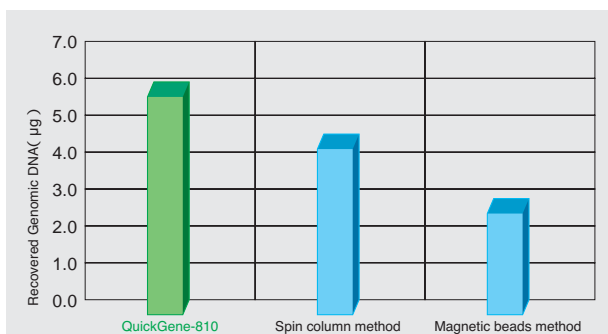


## High yield

High yields of genomic DNA can be isolated from whole blood and total RNA from cultured cells without any need to use hazardous organic solvents.

### DNA isolation yield compared with competitors

Yield of genomic DNA isolated from 200µL of whole blood (average of ten specimens).





## Simple operation and automated processes reduce risk of contamination

There is no need to set complex isolation conditions. Automation ensures that isolation does not fail because of contamination.



## The specific set of isolation kits supports various samples

QuickGene isolation kits are optimized for 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.5 $\mu$ g / Whole blood 200 $\mu$ l
QuickGene DNA tissue kit S	[ for 96 samples ]	Reference code DT-S	ca.4 $\mu$ g / 5mg BALB/c Mouse tail
QuickGene Plasmid kit S II	[ for 96 samples ]	Reference code PL-S2	ca.12.5 $\mu$ g / 1ml culture pBlueScript II / DH5 $\alpha$
QuickGene RNA tissue kit S II	[ for 96 samples ]	Reference code RT-S2	ca.100 $\mu$ g / 30mg Mouse liver
QuickGene RNA cultured cell kit S	[ for 96 samples ]	Reference code RC-S	ca.10 $\mu$ g / $1 \times 10^6$ cell HL60 cell
QuickGene RNA cultured cell HC kit S	[ for 96 samples ]	Reference code RC-S2	90~150 $\mu$ g / 10cm dish cultured HEK293 cell
QuickGene RNA blood cell kit S	[ for 96 samples ]	Reference code RB-S	ca.4.5 $\mu$ g / $1 \times 10^7$ cell Leukocytes

## Specifications

### Overview

- Automated stages : Sample binding, washing and elution
- Throughput : 1 to 8 samples per run
- Display : LCD (16 characters  $\times$  1 line)

\* Research use only

### Operating conditions

- Supply voltage : 100V-240V
- Power supply frequency : 50/60Hz
- Operating conditions : Temperature : 15-30°C  
Humidity : 30-80% (non-condensing)
- Power consumption : 65W

### Isolation modes

- DNA WHOLE BLOOD
- DNA TISSUE
- PLASMID
- RNA TISSUE
- RNA TISSUE PLUS
- RNA CELL
- RNA CELL PLUS
- RNA BLOOD

### Isolation kits

- QuickGene DNA whole blood kit S ( for 96 samples )
- QuickGene DNA tissue kit S ( for 96 samples )
- QuickGene Plasmid kit S II ( for 96 samples )
- QuickGene RNA tissue kit S II ( for 96 samples )
- QuickGene RNA cultured cell kit S ( for 96 samples )
- QuickGene RNA cultured cell HC kit S ( for 96 samples )
- QuickGene RNA blood cell kit S ( for 96 samples )

### Physical specifications

- Dimensions : 448(W)  $\times$  332(D)  $\times$  398(H)mm
- Weight : 21kg



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



North American Distributor  
[www.autogen.com](http://www.autogen.com)  
 AutoGen, Inc. 84 October Hill Road Holliston, MA 01746  
 Tel: 508.429.5965; Fax: 508.429.9765; E-mail: [info@autogen.com](mailto:info@autogen.com)

