

QuickGene QuickGene Series **Application Guide**

Total RNA Isolation from Monocotyledon and Dicotyledonous Plant Tissues

QuickGene RNA cultured cell kit S

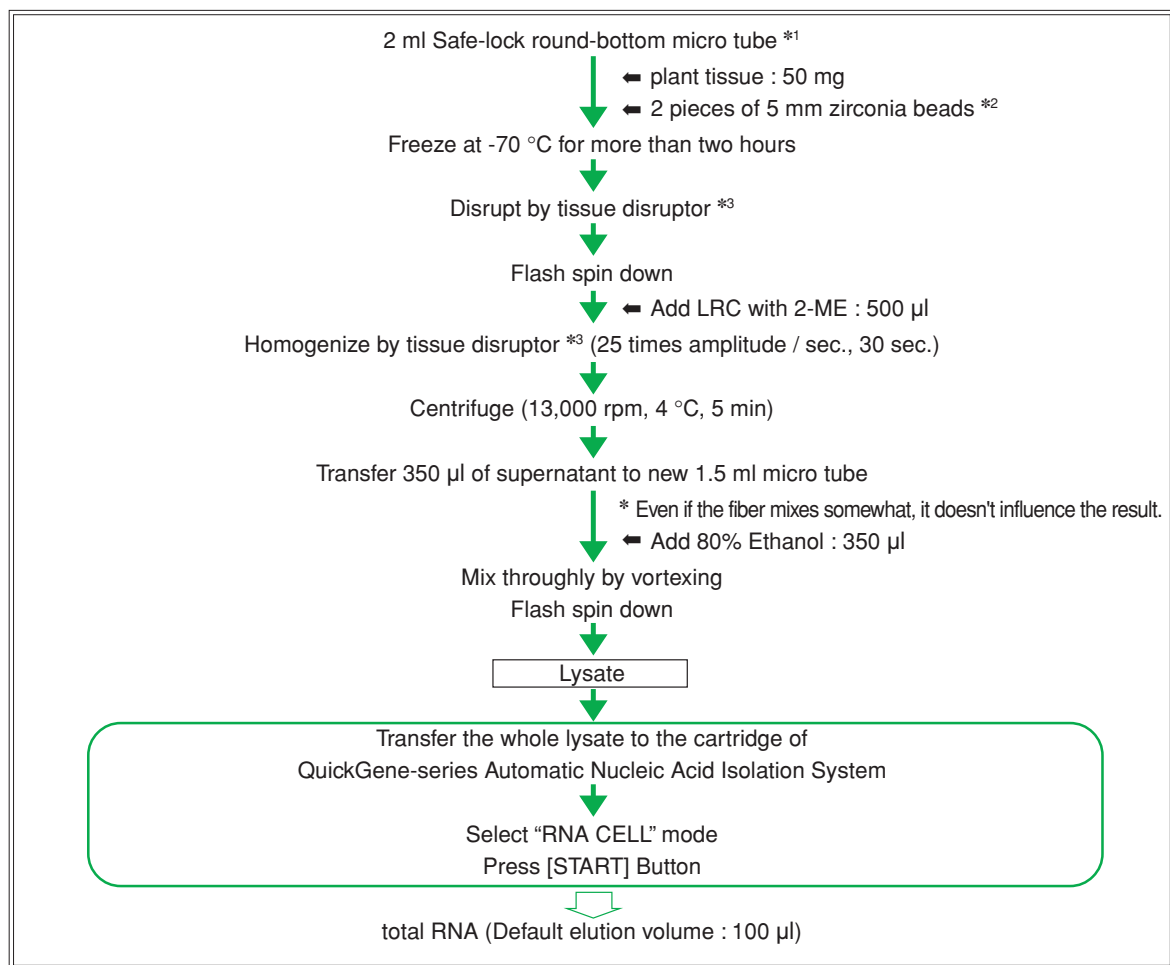
Enables easy and rapid isolation of high-purity total RNA from monocotyledon and dicotyledonous plant tissues

Features

- 3-10 µg of total RNA can be isolated from 50 mg of plant tissues only by pretreatment about 10 minutes.
- High reproducibility
- Safety operation without using hazardous solvent such as phenol

Protocol

● Total RNA isolation from monocotyledon and dicotyledonous plant tissues



*1 : Eppendorf Co., Ltd

*2 : NIKKATO Co., Ltd

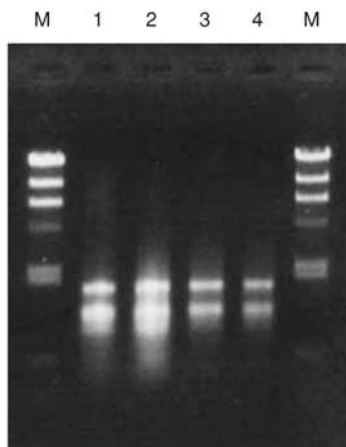
*3 : TissueLyser (Mixer Mill 300) : QIAGEN Co., Ltd.

Please cool the holder of the tissue disruptor beforehand at -20 °C

Please follow the manual of the tissue disruptor about the disruption methods.

Results: Total RNA isolation from monocotyledon and dicotyledonous plant tissues

● AGE of isolated total RNA (Sample : 50 mg of plant tissues)



The total RNA was isolated from monocotyledon and dicotyledonous plant tissues using QuickGene-series Automatic Nucleic-Acid Isolation System and QuickGene RNA cultured cell kit S according to the protocol of the cover.

Electrophoresis condition

0.8% Agarose gel
TAE Buffer
2 μ l of sample / well

M : λ -Hind III (100 ng)

1 : Wheat leaves (*gramineae*)

2 : Barley leaves (*gramineae*)

3 : *Chenopodium quinoa* leaves (*Chenopodiaceae*)

4 : *Nicotiana benthamiana* leaves (*solanaceae*)

● The yield and purity of total RNA

	The yield of total RNA (μ g)	$A_{260/280}$
Wheat leaves	6.12	2.11
Barley leaves	12.2	2.12
<i>C. quinoa</i> leaves	3.88	2.02
<i>N. benthamiana</i> leaves	2.64	1.95

The use of QuickGene system enables the easy and rapid isolation of high-purity total RNA from monocotyledon and dicotyledonous plant tissues.