

QuickGene Series **Application Guide**

## Total RNA Isolation from Monocotyledon and Dicotyledonous Plant Tissues

### QuickGene RNA cultured cell kit S

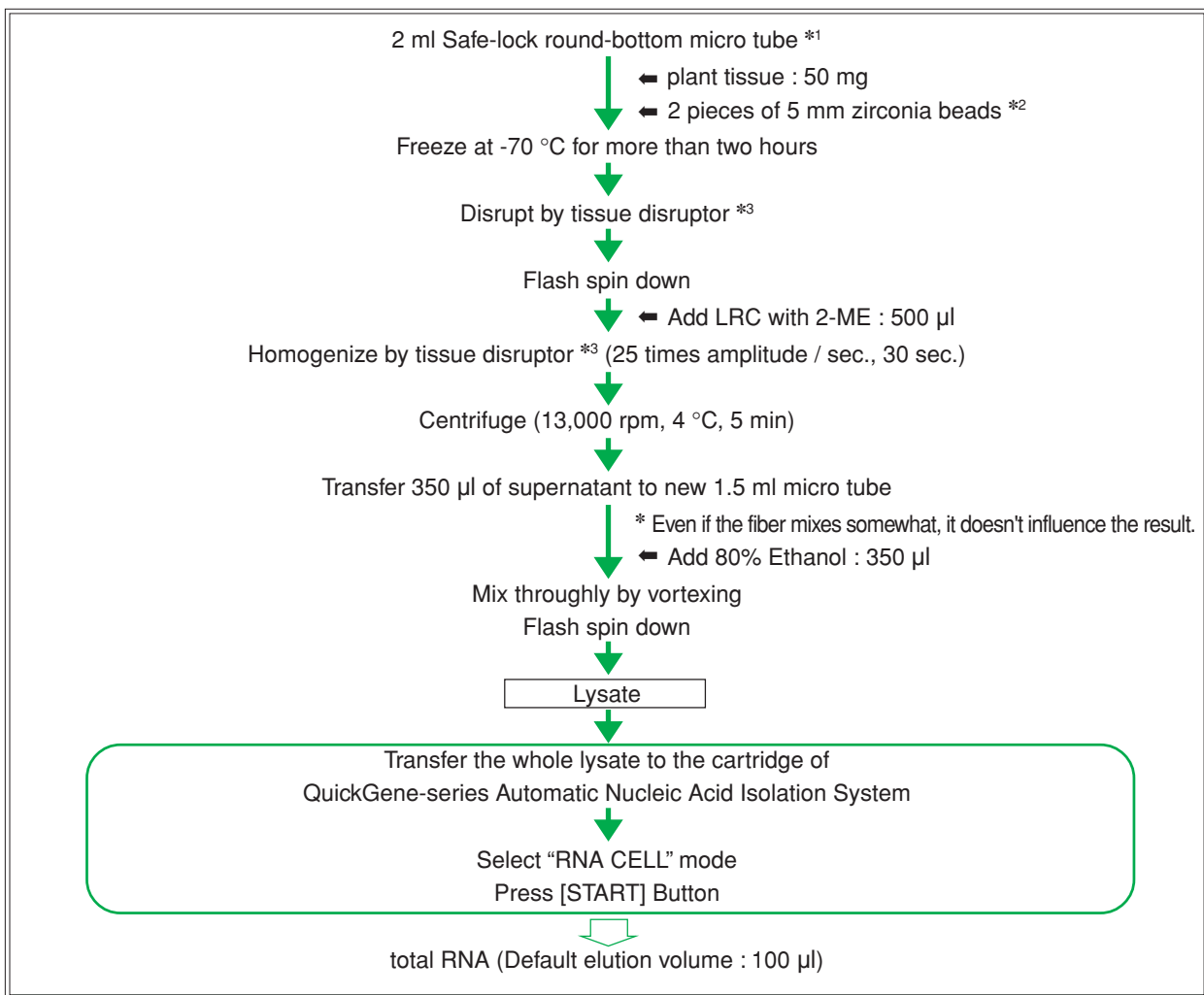
Enables easy and rapid isolation of high-purity total RNA from monocotyledon and dicotyledonous plant tissues

#### 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

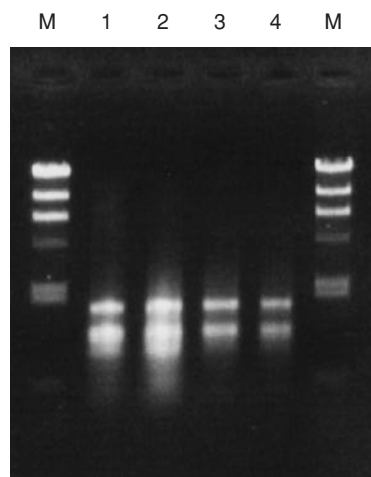
\*3 : TissueLyser (Mixer Mill 300) : QIAGEN Co., Ltd.

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  $\mu$ l of sample / well

M :  $\lambda$ -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 ( $\mu$ 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.