Favorgen Total RNA Isolation Kit II

(For isolation of total RNA, including miRNA and other small RNA)

Cat.: FATRS001, 100 reactions
(For Research Use Only) v.0314

Kit Contents:

Lysis Buffer	25 ml
2M NaOAc, pH 5.2	2.5 ml
Wash Buffer* (concentrated)	5 ml
Release Buffer	5.5 ml
RNA Column	100 pcs
Collection Tube	100 pcs

* Add 20 ml of RNase-free ethanol (96~100%) to Wash Buffer when first open.

Specification:

Storage: room temperature
Handling time: 30 minutes
Sample Size : up to 100 mg tissue
or $1x10^6$ cultured cells

Required Materials provided by user:

Ethanol, Chloroform,
Phenol-ddH_2O saturated,
Microcentrifuge,
Water Bath or Dry Bath or Microwave Oven

Important Notes:

1. Make sure everything is RNase-free when handling RNA extraction.
2. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffers.
3. Add 20 ml of RNase-free ethanol (96-100%) to Wash Buffer when first open.

Generanal Protocol:

Read the Important Note before starting the following steps.

1. Add 200 µl Lysis Buffer into the tube containing up to 100 mg tissue or $1x10^6$ cultured cell pellet.

2. Vigorous mixing by vortexing. Incubate at room temperature for 10 minutes.

3. Add 20 µl 2M NaOAc, pH 5.2.

4. Add 180 µl phenol-ddH_2O saturated and 40 µl chloroform into the tube, vortex vigorously for 2 minutes.

5. Centrifuge at 12,000 rpm for 3 minutes. Transfer the upper phase into a clean tube.

6. Add ethanol to 70% volume (ex., add 467 µl ethanol to 200 µl upper phase). Mix well.

7. Transfer to a RNA Column in the Collection Tube. Incubate for 1 minute.

8. Centrifuge at 12,000 rpm for 30 seconds.

9. Add 200 µl Wash Buffer (ethanol added). Incubate for 1 minute.

10. Centrifuge at 12,000 rpm for 1 minute to completely remove the residue liquid.

11. Put the RNA Column to a clean 1.5 ml tube.

12. Add 50 µl Release Buffer (preheated to 65°C) to the center of column. Incubate for 3 minutes.

13. Centrifuge at 12,000 rpm for 3 minute to recover total RNA.