BIOTnA Biotech
BIOSCIENCE FOR THE LAB.

Product Name: Tissue Total RNA Mini Kit
Catalog No.: TAEK04R
INTENDED USE: For Research Use Only. Not for use in diagnostic procedures.
DESCRIPTION:

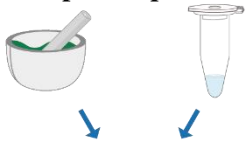
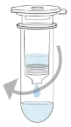
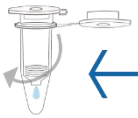
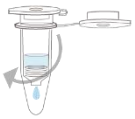
Tissue Total RNA Mini Kit

Cat. No:	TAEK04R-50 (50 preps)	TAEK04R-100 (100 preps)
RB Buffer	25 ml	45 ml
Wash Buffer 1	30 ml	60 ml
Wash Buffer 2	15 ml	35 ml
RNase-free Water	6 ml	6 ml
Filter Column	50 pcs	100 pcs
RB Mini Column	50 pcs	100 pcs
Collection Tube	100 pcs	200 pcs
Elution Tube	50 pcs	100 pcs
Preparation of Wash Buffer 2 by adding ethanol (96 ~ 100%)		
Ethanol volume for Wash Buffer 2	60 ml	140 ml

Important Notes:

1. Make sure everything is RNase-free when handling RNA.
2. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffers.
3. Caution: ß-mercaptoethanol is hazardous to human health. Perform the procedures involving RB Buffer in a chemical fume hood.
4. Add required volume of RNase-free ethanol (96~100%) to Wash Buffer 2 when first use.
5. Dilute RNase-free DNase 1 in reaction buffer (1M NaCl, 10 mM MnCl2, 20 mM Tris-HCl, pH 7.0 at 25ºC) to final conc. = 0.5 U/µl.

Protocol:

Sample Preparation 	A. For Tissue Sample: Homogenization (Grind the sample in liquid nitrogen) B. For Cultured cells: Centrifuge at 300 x g for 5 min at 4°C.
Lysis 	Add **350 µl of RB Buffer** and **3.5 µl of ß-Mercaptoethanol.**
Filtration 	1. Filtration: Centrifuge at full speed (~18,000 x g) for 2 min. 2. Add 1 volume 70% Ethanol to the supernatant.
Binding 	Transfer the supernatant to RB Mini Column. Centrifuge at full speed (~18,000 x g) for 1 min.
Wash  Optional step: DNase I digestion	1. Add **500 µl of Wash Buffer 1.** Centrifuge at full speed (~18,000 x g) for 1 min. 2. Add **750 µl of Wash Buffer 2.** Centrifuge at full speed (~18,000 x g) for 1 min. Repeat this step for one more washing.
Dry 	Centrifuge at full speed (~18,000 x g) for an additional 3 min to dry the column.
Elution 	Add **40 ~ 100 µl of RNase-free ddH_2O** Stand for 1 min. Centrifuge at full speed (~18,000 x g) for 1 min Store RNA at -70°C.
Pure RNA 	**Optional step:** 1. Add **250 µl of Wash Buffer 1.** Centrifuge at full speed (~18,000 x g) for 1 min. **2.** Add **60 µl of RNase-free DNase 1 solution (0.5U/ul, not provided).** Stand for 15 min. 3. Add **250 µl of Wash Buffer 1.** Centrifuge at full speed (~18,000 x g) for 1 min. 4. Add **750 µl of Wash Buffer 2.** Centrifuge at full speed (~18,000 x g) for 1 min. 5. Repeat this step for one more washing.

Storage and Stability:

Please read the kit contents and follow the storge condition. The user must validate any other storage conditions. When properly stored, the reagent is stable until the date indicated on the label. Do not use the reagent beyond the expiration date. If unexpected results are observed which cannot be explained by variations in laboratory procedures and a problem with the reagent is suspected, contact Technical: info@biotna.net