## Quick Start Guide

# GenElute™ 96 well Total RNA Purification Kit

#### RTN9604

### Reagents to Prepare

- Add 360 and 150 mL of 96-100% ethanol to each bottle of RNA Wash Buffer 2 and RNA Wash Buffer 3, respectively. After each use, tightly cap to prevent ethanol evaporation.
- Reconstitute RNase-free rDNase by adding 540 μL of RNase-free Water and incubate for 1 min at room temperature. Gently mix to ensure complete dissolution. If not using the entire 96 well plate, aliquot reconstituted rDNase solution and store at -20 °C.
- For each sample to be processed mix 10 μL of reconstituted rDNase with 90 µL of Reaction Buffer for rDNase.

#### Protocol

All centrifugations carried out at 5,600-6,000 x g.

#### **Harvest and Lyse Pelleted Cells**

1. Pellet cells by spinning for 5 min at 500 x g and remove supernatant. Add 300  $\mu L$  RNA Lysis Buffer and 3  $\mu L$  $\beta$ -mercaptoethanol (2-ME) to each sample and mix thoroughly. Continue to Sample Loading.

#### **Harvest and Lyse Attached Cells**

1. Aspirate culture medium and add 130 μL RNA Lysis Buffer and 1.3 μL β-mercaptoethanol (2-ME) to each well of cell culture plate and mix thoroughly. Continue to Sample Loading.

#### **Harvest and Lyse Tissue**

1. Quickly slice and weigh tissue. Transfer to appropriate vessel for homogenization. Add 300 µL RNA Lysis Solution and 3 μL β-mercaptoethanol (2-ME) and homogenize until no visible pieces remain. Continue to Sample Loading.

#### Sample Loading

- 2. Add an equal volume (either 300 μL or 130 μL) of RNA Wash Buffer 3 and pipet up and down at least
- 3. Place RNA Binding Plate on Square-well Block and transfer lysates to the RNA Binding Plate. Spin for 2 min and empty Square-well Block.

#### **Bind DNA**

- 4. Add 500 µL RNA Wash Buffer 2 to each well. Place Binding Plate on top of Square-well Block, spin for 2 min, and empty Square-well Block.
- 5. Carefully add 95 µL of the prepared rDNase directly to entire membrane and incubate for 15 min at room temperature.

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#### Wash to remove contaminants

- 6. Add 500 µL RNA Wash Buffer 1. Place Binding Plate on top of Square-well Block, spin for 2 min, and empty Square-well Block.
- 7. Add 800 µL RNA Wash Buffer 2. Place Binding Plate on top of Square-well Block, spin for 2 min, and empty Square-well Block.
- 8. Add 500 µL RNA Wash Buffer 3. Place Binding Plate on top of Square-well Block, spin for 2 min, and empty Square-well Block.
- 9. Place Binding Plate on top of Square-well Block and spin for an additional 10 min to eliminate any trace ethanol. Empty Square-well Block.

#### **Elute purified DNA**

10. Place Binding Plate on top of Round-well Block and add 75 µL RNase-free water to the bottom of each well. Incubate at room temperature for 2 min and spin for 3 min to elute RNA.

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