# **Product information**

# EZ-10 Spin Column Animal Total RNA Mini-Preps Kit

Storage: 2 years at room temperature.

Product Code	BS82312	BS82322
Size	50 Preps	250 Preps
Buffer Rlysis-AG	25 ml	125 ml
Universal GT Solution*	18 ml	90 ml
Universal NT Solution*	6 ml	30 ml
RNase-free Water	5 ml	25 ml
EZ-10 Spin Column	50	250
2 ml Collection Tube	50	250
Protocol	1	1

\*Universal GT Solution and Universal NT Solution are supplied in a concentrated form. Before use, add 12ml or 60ml 96-100% ethanol to 18 ml or 90ml concentrated universal GT solution and 24 ml 96-100% ethanol to 6ml concentrated universal NT solution.

**NOTE:** Care must be taken when working with RNA. It is important to maintain an RNAse-free environment starting with RNA sample preparation and continue through purification and analysis. Use RNAse free tubes, tips, gels. Wear gloves at all

## Introduction:

EZ-10 Column Animal total RNA Purification Kit provides a simple spin column technique for preparation of high quality, high-purity intact total RNA. The reagent contains disruptive and protective properties of guanidine isothiocyanate and  $\beta$ -mercaptoethanol to inactivate the ribonucleases present in cell extracts. RNA in the whole homogeneity is selectively absorbed on spin column and other impurities are washed away. Total RNA is eluted from the membrane in the presence of RNase-free water.

5-15  $\mu$ g total RNA can be purified from 25 mg animal tissue using this kit. Purified RNA is ready for most downstream applications such as RT-PCR, Northern Blotting, Poly (A) selection and in vitro translation.

#### **Features:**

- Fast. Using a rapid spin-column format, the entire procedure takes approx 15 minutes.
- High Purity of RNA. OD260/OD280 ratio of purified RNA is generally > 1.9.
- Compatible with downstream applications such as Northern Blots, cDNA synthesis, RT-PCR and qRT-PCR.
- High Quality RNA. Buffer Rlysis-AG maintains the integrity of the RNA.
- Economic.

## **Materials Supplied by User:**

- Microcentrifuge capable of at least 12,000 x g
- RNase-Free pipets and pipet tips
- Vortexer
- RNase-Free Ethanol (96-100%)
- RNase-Free Microcentrifuge tubes (1.5ml or 2ml)

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#### **Procedures:**

- 1. Add 350 μl Buffer Rlysis-AG into RNase-Free 1.5 ml centrifuge tubes.
- 2. Grind 25~50 mg animal tissue to fine powder in liquid nitrogen. Transfer the powder to the 1.5 ml RNase-free centrifuge tube in step 1 and mix by inverting immediately.
- 3. Incubate at room temperature for 5 minutes to make sure the cells are completely lysed.
- 4. Add 1/2 volume of ethanol, mix by inverting the tube.
- 5. Transfer the solution to the spin column. Centrifuge at 12,000 × g for 30 sec at room temperature, discard the flow-through.
- 6. Add 0.5 ml of Universal GT Solution to the column, centrifuge at 12,000 × g for 30 sec at room temperature, discard the flow-through.
- 7. Add 0.5 ml of Universal NT Solution to the column, centrifuge at 12,000 × g for 30 sec at room temperature, discard the flow-through.
- 8. Centrifuge the column at 12,000 × g for additional 30 sec at room temperature. Note: This step is very important to remove the residual ethanol thoroughly.
- 9. Place the column in a new 1.5 ml RNase-Free centrifuge tube. Add 50 μl RNase-free Water. Keep at room temperature for 2 minutes. Centrifuge at 12,000 × g for 30 sec at room temperature, store RNA solution at -80°C.



PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY.

NOT INTENDED FOR HUMAN OR ANIMAL USE.