

# RNAhold®

Please read the manual carefully before use

Cat. No. EH101

Storage: at 15°C-30°C for two years

# **Description**

*RNAhold*® is a tissue preservation solution. It can inactivate RNase and keep RNA intact by permeating cells and tissues. It can be used for RNA preservation with bacteria, cells, and fresh, non-frozen tissue samples from various animals.

#### **Procedure**

# I. Sample preparation

RNAhold® may form precipitates at low temperatures. If precipitation occurs, it should be completely dissolved by warming at 37°C.

- 1. Fresh, non-frozen tissue sample
- (1) The amount of *RNAhold*<sup>®</sup>: The ratio of tissue sample to *RNAhold*<sup>®</sup> is 1:5-10. For example, use 0.5-1 ml *RNAhold*<sup>®</sup> for 0.1 g tissue samples, and immerse sample completely into *RNAhold*<sup>®</sup>.
- (2) Quickly cut up large samples into small pieces (<0.5 cm) in any single dimension, and immerse it into *RNAhold*<sup>®</sup>. (Small organs such as mouse kidney or spleen can be stored in *RNAhold*<sup>®</sup> solution directly).
- 2. Animal cells and bacteria
- (1) Centrifuge the suspension of cells or bacteria, discard the supernatant.
- (2) Wash the pellet once with 50-100 µl of ice-cold PBS.
- (3) Resuspend the pellet in 50-100 μl of ice-cold PBS.
- (4) Add 5-10 volumes of *RNAhold*® solution and mix thoroughly.
- 3. White blood cells in whole blood
- (1) Separate the white blood cells from the red blood cells and sera.
- (2) Wash the pellet once with 50-100 µl of ice-cold PBS.
- (3) Resuspend the pellet in 50-100 µl of ice-cold PBS.
- (4) Add 5-10 volumes of RNAhold® solution and mix thoroughly.

## II. Sample storage

- 1. Samples in *RNAhold*® solution can be stored at 2-8°C for at least one month, at room temperature for one week , or at 37 °C for one day .
- 2. Long-term storage at -20 °C: incubate the samples in *RNAhold*<sup>®</sup> solution overnight at 2-8 °C to allow thorough penetration of the sample, then transfer to -20 °C.
- 3. Long-term storage at -70°C: incubate the samples in *RNAhold*<sup>®</sup> solution overnight at 2-8°C to allow thorough penetration of the tissue. Centrifuge and discard the preservation solution, then transfer to -70°C.

## III. RNA isolation

- 1. For tissue samples, retrieve tissue from RNAhold® solution with sterile forceps to start RNA isolation.
- 2. For cell samples, samples storage at 2-8°C, -20°C and room temperature, centrifuge and remove solution prior to extraction;

storage at -70°C can be extracted without centrifugation.

### Note

- Tissues stored in RNAhold® solution can be frozen and thawed at least 20 times.
- RNAhold® requires a higher centrifugation force than common media due to its greater density.

For research use only, not for clinical diagnosis. Service telephone +86-10-57815020 Service email custserv@transgenbiotech.com

