

# **RNA Save**

# Tissue storage solution for RNA stabilization

Cat. No.: 01-891-1

Store at: Room Temperature

## Instructions for Use

## **Product Description**

RNA Save is an aqueous, non toxic, tissue and cells storage solution intended for the preservation of RNA for a later isolation.

Samples in RNA Save solution can be stored indefinitely at  $-20^{\circ}$ C or  $-80^{\circ}$ C with no RNA degradation.

RNA save solution can be used for the storage of tissues, cells, bacteria and yeasts. The solution may not be effective for the storage of waxy plant tissue and bone because of poor penetration of the solution.

RNA Save is compatible with most RNA isolation methods.

#### Storage

RNA Save should be stored at room temperature. If precipitation is seen, warm the solution to 37°C and mix carefully for resolubilization.

#### **Handling Precautions**

RNA Save contains irritants. Handle with care, avoid contact with skin, and use eye protection. In case of contact, wash skin with a large amount of water.



#### Use of RNA Save solution

#### Important:

- Use RNA Save with fresh tissue only. Do not freeze tissues before immersion in RNA Save solution.
- Do not freeze samples in RNA Save immediately- store at 4°C overnight to allow the solution to penetrate the tissue.
   For long-term storage transfer the sample to -20°C or -80°C.

#### 1. Animal Tissue

Place the fresh tissue in 5-10 volumes of RNA Save solution. Cut large tissue samples to 0.5cm pieces. Small organs, such as mouse organs, can be put whole in RNA Save solution.

#### 2. Plant Tissue

Many plant tissues can be stored in RNA Save. Some plant tissues with waxy coating may require disruption to allow the solution to penetrate the tissue.

#### 3. Cells

Pellet the cells, remove supernatant and add 5-10 volumes RNA Save solution.

#### 4. Bacterial Cells

Pellet the bacterial cells, remove supernatant and add 5-10 volumes of RNA Save solution.

#### 5. Yeast Cells

Pellet 1-3 x10 $^8$  cells: centrifuge at 10,000-12,000g for 3 minutes. Remove supernatant and add 0.5-1 ml of RNA Save solution. Incubate the cells in RNA Save solution for 1hr. at room temperature and re-pellet the cells. Remove supernatant and freeze immediately at  $-80^{\circ}$ C.

#### 6. White blood cells

Separate the white blood cells from the whole blood and continue as for cells (section 3).

### Storage in RNA Save solution

#### 1. Storage at 4°C.

Samples can be stored in RNA Save solution at 4°C. For up to 1 month without significant RNA degradation.

#### 2. Storage at -20°C.

Incubate samples in RNA Save solution overnight at 4°C only then transfer to -20°C. Samples will not freeze at -20°C but crystals may form- this will not affect subsequent RNA isolation. Samples can be stored at -20°C indefinitely.

#### 3. Storage at -80°C.

Storage at  $-80\,^{\circ}\text{C}$  is recommended and will provide optimal long term preservation.

Incubate samples in RNA Save solution overnight at  $4^{\circ}$ C only then transfer to  $-80^{\circ}$ C. Samples can be stored at  $-80^{\circ}$ C indefinitely.

Notice that RNA Save will be frozen at -80°C.

# RNA isolation from samples in RNA Save solution

#### 1. Tissue

Using sterile forceps, transfer the tissue from RNA Save solution to RNA isolation lysis solution. Homogenize tissue in the lysis solution and continue according to the RNA isolation method used.

#### 2. Cells

Dilute the RNA Save solution with an equal volume of cold Dulbecco's PBS (or other buffered solution) to reduce the density of the solution and immediately centrifuge at normal speeds to pellet the cells.

RNA extraction from cells in RNA Save solution: Any isolation method can be used to purify RNA from the cells such as EZ-RNA (Cat. No. 20-400-100) or EZ-RNA II (Cat. No. 20-410-100).

## **Auxiliary products**

Product	Cat. No.
EZ-RNA Total RNA Isolation Kit	20-400-100
EZ-RNA II Total RNA Isolation Kit	20-410-100





Email: info@bioind.com
www.bioind.com



