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A Geno Technology, Inc. (USA) brand name

# RNA-Conserve™

**For Preservation and Stabilization of RNA in Biological Samples.  
Suitable for collection and transportation of specimens**

**(Cat. # 786-1687, 786-1688, 786-1689, 786-1690, 786-1691)**



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## INTRODUCTION

RNA-Conserve™ is designed for the preservation of RNA in biological samples, including but not limited to; cells, tissues, bacteria, RNA-virus, yeast, plant tissues, biological fluids, field and test site collected specimens, swabs, and so forth. Purified RNA when stored in RNA-Conserve™, is protected from degradation and will remain stable after prolonged storage. The RNA-Conserve™ formulation is optimized with non-toxic salts and preserving reagents to permeate samples and inactivate RNase. Inactivation of RNases eliminates the urgency for immediate processing of the biological samples or cryopreservation. Biological samples treated with RNA-Conserve™ can be conveniently stored or transported without RNA degradation. Samples treated with RNA-Conserve™ can be stored for up to 1 day at 37°C, 1 week at room temperature (~25°C), one month at 4°C and indefinitely at -20°C or lower temperatures.

RNA-Conserve™ is compatible with most RNA isolation methods, including Tri-Xtract™ (Cat. # 786-652) offered by G-Biosciences and the RNA is suitable for downstream applications.

## ITEMS SUPPLIED

| Cat. #   | Description   | Size               |
|----------|---------------|--------------------|
| 786-1687 | RNA-Conserve™ | 10 ml              |
| 786-1688 | RNA-Conserve™ | 5 x 10 ml          |
| 786-1689 | RNA-Conserve™ | 100 ml             |
| 786-1690 | RNA-Conserve™ | 5 x 100 ml         |
| 786-1691 | RNA-Conserve™ | 25 x<br>1.5ml/vial |

## STORAGE CONDITIONS

RNA-Conserve™ Solution is shipped at ambient temperature. Store at room temperature upon receipt. If precipitate is seen, warm the solution at room temperature and mix to dissolve the precipitate. When stored as directed it is stable for 2 years.

## ADDITIONAL ITEMS NEEDED

- RNaseOUT™ (Cat. # 786-70) for RNase decontamination from working surface, working tools such tubes, pipettors, and so forth. (optional).
- PBS (Cat. # 786-377)

## IMPORTANT INFORMATION

1. Treat samples with RNA-Conserve™ prior to onset of RNA degradation to achieve optimal results. Use fresh samples for RNA preservation. NOTE: *degraded samples and specimens treated with RNA-Conserve™ cannot be guaranteed to yield satisfactory RNA.*
2. Solid and impermeable samples should be first shredded or crushed prior to RNA-Conserve™ treatment to enhance permeation of the reagent into the samples.
3. Incubate RNA-Conserve™ treated samples at room temperature or 4°C for 60 minutes or longer to allow the reagent to penetrate and saturate the sample before storage. For long term storage, incubate the treated samples overnight at 4°C and then transfer and store at -20°C or lower temperature. Excess RNA-Conserve™ or supernatant may be removed before storage.

## PROCEDURE

### **Swab collected Specimens:**

1. Immerse the swab (after the collection of specimens) into the RNA-Conserve™ provided in the vial.
2. Mix or vortex to disperse the specimen into the RNA-Conserve™.
3. Incubate at room temperature for 60 minutes before considering further handling or storage. Read IMPORTANT INFORMATION.

### **Animal tissue**

4. Cut the tissue in small pieces of less than 0.5 cm thick.
5. Add 5 volumes of RNA-Conserve™.
6. Incubate overnight at 4°C.
7. Remove excess of RNA-Conserve™. Store at -20°C. or lower temperature.

### **Plant tissue**

1. Crush or shred plant tissues into small pieces to allow reagent permeation. Softer plant tissues and leaves may be treated without crushing or shredding.
2. Add 5 volumes of RNA-Conserve™.
3. Incubate overnight at 4°C. Store at -20°C for long term storage.

### **Mammalian cells**

1. Centrifuge the cells at 1000 g for 5 minutes.
2. Wash the cells with PBS, centrifuge at 1000 g for 5 minutes to pellet the cells.

3. Remove and discard supernatant wash.
4. Add 5 volumes of RNA-Conserve™ and resuspend the cell pellet.
5. Incubate at room temperature or 4°C for 60 minutes. Store at either 4°C or -20°C, depending on your application.

#### ***White blood cells***

1. Separate or filter whole blood cells to collect white blood cells.
2. Wash and pellet the white blood cells in PBS. Remove and discard supernatant wash.
3. Add 5 volumes of RNA-Conserve™ and resuspend the cells.
4. Incubate at room temperature or 4°C for 60 minutes. Store either at 4°C or -20°C, depending on your application.

#### ***Yeast & Bacterial cells***

1. Centrifuge at 5000 g for 3-5 minutes to pellet the cells.
2. Wash the cells with PBS and centrifuge at 5000 g to pellet the cells. Remove and discard supernatant wash.
3. Add 5 volumes of RNA-Conserve™. Resuspend the cells.
4. Incubate at room temperature or at 4°C for 60 minutes. Store either at 4°C or -20°C, depending on your application.

#### ***Processing of the samples stored in RNA-Conserve™ for extraction of RNA.***

##### ***Tissues, solids & cell suspensions samples***

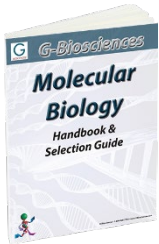
1. Bring the sample to room temperature.
2. Remove the RNA-Conserve™ solution from the tissue, solid & cell suspension specimens or pick the tissue from solution with the help of a clean RNAse-free forceps.
3. Add RNA extraction & lysis solution and proceed to RNA extraction.

##### ***Samples that are not solid and can't be separated from RNA-Conserve™***

1. Add ten volume RNA extraction & lysis solution directly into the RNA-Conserve™ treated samples. For examples, add appropriate volume of Tri-Xtract™ (Cat. # 786-652) offered by G-Biosciences.
4. Proceed to RNA extraction.

#### **RELATED PRODUCTS**

Download our Molecular Biology Handbook.



<http://info2.gbiosciences.com/complete-molecular-biology-handbook>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.



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