

RNAstill™ RNA Stabilization Reagent

Cat. No.:	YRS100	YRS250	YRS500
Product Name:	RNAstill™ RNA Stabilization Reagent		
Size:	100ml	250ml	500ml
Sample Types:	Animal tissue, plant tissue, cultured cells, white blood cells and bacteria		
Format:	Reagent		

Introduction

RNAstill™ RNA Stabilization Reagent is a non-toxin aqueous tissue and cells storage reagent that rapidly permeates most tissues to stabilize and protect RNA in fresh specimens. RNAstill™ RNA Stabilization Reagent eliminates the need to immediately process or freeze samples; the specimen can simply be submerged in RNAstill™ RNA Stabilization Reagent and stored for analysis at a later date. The stability of sample which preserved in RNAstill™ RNA Stabilization Reagent are stable for 1 day at 37°C, 1 week at room temperature, 1 month at 4°C and indefinitely at -20°C. This reagent is suitable for various samples from animal & plant tissues, culture cells and bacteria without using liquid nitrogen or -80°C freezer. The purified RNA is high quality and intact as stored in liquid nitrogen.

Features

1. Immediate RNA stabilization and protection.
2. Tissue archiving without risk of RNA degradation.
3. Perfect for tissue collection where immediate RNA isolation is not possible.
4. Convenient and safe handling at room temperature.
5. No need for liquid nitrogen or dry ice.

Contents

ITEM	YRS100	YRS250	YRS500
RNAstill™ RNA Stabilization Reagent	100ml	250ml	500ml

Storage Conditions

RNAstill™ RNA Stabilization Reagent should be stored dry at room temperature (15–25°C) and are stable for at least 12 months under these conditions. Storage of RNAstill™ RNA Stabilization Reagent at lower temperatures may cause precipitation. Before using the reagent, re-dissolve the precipitate by heating to 37°C with agitation.

Applications

Animal tissue, plant tissue, cultured cells, white blood cells and bacteria stabilized in RNAstill™ RNA Stabilization Reagent can be stored indefinitely at -20°C for analysis at a later date. The purified RNA is high quality and intact as stored in liquid nitrogen.

The stability of sample which preserved in RNAstill™ RNA Stabilization Reagent are stable for 1 day at 37°C, 1 week at room temperature, 1 month at 4°C and indefinitely at -20°C.

Sample can be thawed and frozen many times without affecting the RNA quality. The low temperature may cause the formation of crystals or a precipitate in the reagent. This will not affect subsequent RNA purification.

Quality Control

The quality of RNAstill™ RNA Stabilization Reagent is tested on a lot-to-lot basis against predetermined specifications to ensure consistent product quality.

Caution

RNAstill™ RNA Stabilization Reagent contains irritants. During operation, always wear a lab coat, disposable gloves, and protective goggles.

Product Use Limitations

RNAstill™ RNA Stabilization Reagent is intended for research applications. No claim or representation is intended for their use to provide information for the diagnosis, prevention, or treatment of a disease. All due care and attention should be exercised in the handling of the products.

Protocol: RNA Stabilization

Important Notes Before Starting:

- ※ Only fresh, unfrozen tissues can be stabilized using RNAsstill™ RNA Stabilization Reagent.
- ※ If any precipitation is formed in RNAsstill™ RNA Stabilization Reagent, heat the reagent to 37°C and agitate to re-dissolve the precipitation.
- ※ Completely submerge the tissue or cells in the RNAsstill™ RNA Stabilization Reagent immediately after harvesting the samples. Smaller volumes of reagent will lead to RNA degradation during storage.
- ※ If the tissue or cells samples are to be transported in RNAsstill™ RNA Stabilization Reagent, ensure that the samples remain submerged in the liquid during transport. Ensure that the tubes remain upright during transport.
- ※ For archival storage at -20 °C, first incubate the sample overnight in the reagent at 2 – 8 °C. Then transfer the tissue, in the reagent, to -20 °C for storage.

Animal Tissue	<ol style="list-style-type: none"> 1. Weight & cut the tissue samples into small pieces (each sample < 0.5 cm thick). 2. Immediately add the dissected tissues into the tube with at least 5 volumes of RNAsstill™ RNA Stabilization Reagent. (e.g. : 5 ml of RNAsstill™ RNA Stabilization Reagent is required for 1 g of tissue)
Plant Tissue	Weight & cut the tissue into small pieces and immediately add the sample into the tube with at least 5 volumes of RNAsstill™ RNA Stabilization Reagent.
Cultured Cells	<ol style="list-style-type: none"> 1. Spin down the cells and wash with PBS solution. 2. Resuspend the cells in PBS solution, and immediately add at least 5 volumes of RNAsstill™ RNA Stabilization Reagent. (e.g.: 500µL of RNAsstill™ RNA Stabilization Reagent is required for 100µL of PBS).
White Blood Cells	<ol style="list-style-type: none"> 1. Separate white blood cells from whole blood and wash with PBS solution. 2. Resuspend the cells in PBS solution and immediately add at least 5 volumes of RNAsstill™ RNA Stabilization Reagent. <p style="color: red;">Notes: The RNAsstill™ RNA Stabilization Reagent can't be used directly on whole blood sample, which will precipitate during storage.</p>
Bacteria	<ol style="list-style-type: none"> 1. Spin down & wash the cells with TE buffer, and resuspend the cells in TE buffer. 2. Immediately add at least 5 volumes of RNAsstill™ RNA Stabilization Reagent. (e.g.: 500µL of RNAsstill™ RNA Stabilization Reagent is required for 100µL of TE buffer)

Storage Conditions for Samples

After submersing in RNAstill™ RNA Stabilization Reagent, the sample can be stored for a day at 37°C, 1 week at room temperature, 1 month at 4°C and indefinitely at -20°C. Sample can be thawed and frozen many times without affecting the RNA quality. The low temperature may cause the formation of crystals or a precipitate in the reagent. This will not affect subsequent RNA purification.

RNA Purification

Tissue	<p>Remove the RNAstill™ RNA Stabilization Reagent or use a clean forceps to take out the tissue. Add RNA extraction lysis solution and proceed to standard protocols of following kits:</p> <p><u>Column System</u> HiYield Total RNA Mini Kit (Tissue) 【Cat. No. YRT50, YRT100, YRT300】 HiYield Total RNA Maxi Kit (Tissue) 【Cat. No. YRTM10, YRTM25】 HiYield Total RNA Mini Kit (Plant) 【Cat. No. YRP50, YRP100, YRP300】 HiYield Total RNA Maxi Kit (Plant) 【Cat. No. YRPM10, YRPM25】</p> <p><u>Reagent System</u> HiYield Total RNA Isolation Kit (Blood/Bacteria/Cultured Cells/Tissue) 【Cat. No. YTR100, YTR500】 HiYield Total RNA Isolation Kit (Plant) 【Cat. No. YTP100, YTP500】</p>
Cells	<p>Spin down the cell at 5000 x g for 3 minutes and remove the RNAstill™ RNA Stabilization Reagent. Add RNA extraction lysis solution and proceed to standard protocols of following kits:</p> <p><u>Column System</u> HiYield Total RNA Mini Kit (Blood/Bacteria/Cultured Cells) 【Cat. No. YRB50, YRB100, YRB300】 HiYield Total RNA Mini Kit (Blood/Bacteria/Cultured Cells) 【Cat. No. YRBM10, YRBM25】</p> <p><u>Reagent System</u> HiYield Total RNA Isolation Kit (Blood/Bacteria/Cultured Cells/Tissue) 【Cat. No. YTR100, YTR500】</p>

Genomic DNA Purification

Genomic DNA is also preserved in RNAstill™ RNA Stabilization Reagent. The DNA purified from samples which stored in RNAstill™ RNA Stabilization Reagent will be suitable for applications such as PCR and Southern blotting. RBC kits for genomic DNA purification are listed below:

Column System

HiYield Genomic DNA Mini Kit (Blood/Bacteria/Cultured Cells) 【Cat. No. YGB100, YGB300】
HiYield Genomic DNA Mini Kit (Blood/Tissue/Cultured Cells) 【Cat. No. QBT100, QBT300】
HiYield Genomic DNA Midi Kit (Fresh Blood/ Cultured Cells) 【Cat. No. YGBI25】
HiYield Genomic DNA Maxi Kit (Fresh Blood/ Cultured Cells) 【Cat. No. YGBM10, YGBM25】
HiYield Genomic DNA Mini Kit (Tissue) 【Cat. No. YGT50, YGT100, YGT300】
HiYield Genomic DNA Mini Kit (Plant) 【Cat. No. YGP100】
HiYield Genomic DNA Midi Kit (Plant) 【Cat. No. YGPI25】
HiYield Genomic DNA Maxi Kit (Plant) 【Cat. No. YGPM10, YGPM25】
HiYield Genomic DNA Mini Kit (Bacteria) 【Cat. No. YGC100, YGC300】
HiYield Genomic DNA Extraction Kit (Buccal Swab) 【Cat. No. YGS100, YGS300】
HiYield Genomic DNA Micro Kit 【Cat. No. YGM100, YGM300】

Reagent System

AmpEasy Tissue PCR Kit 【Cat. No. YG101, YG102】
HiYield Genomic DNA Isolation Kit (Blood/Bacteria/Cultured Cells/Tissue)
【Cat. No. YGE100, YGE500, YGE1000】
HiYield Genomic DNA Isolation Kit (Plant) 【Cat. No. YGL100, YGL500】
HiYield Genomic DNA Isolation Kit (Yeast) 【Cat. No. YGY100, YGY300】

Protein Purification

Proteins are also preserved in RNAstill™ RNA Stabilization Reagent. RNAstill™ RNA Stabilization Reagent will denature proteins; therefore, protein purified from samples stored in RNAstill™ RNA Stabilization Reagent will be suitable for applications such as Western blotting or 2D gel electrophoresis, but not for applications that require native protein.

TRleasy DNA / RNA / Protein Isolation Kit 【Cat. No. TDR100, TDR200】
TRleasy Protein Isolation Kit 【Cat. No. TPI030】