

**Storage and Stability:**

Cellixi-Guard is shipped at room temperature. For optimal performance, we recommend to store at +4 °C.

**Expiry:**

When stored under the recommended conditions and handled correctly, full activity is retained until the expiry date on the outer box label.

**Safety Precautions:**

Non-Toxic in contact with skin. Toxic if swallowed. Causes burns. Please refer to the material safety data sheet for information regarding hazards and safe handling practice.

**Catalog Numbers****Cellixi-Guard**

RNA preservative  
solution

cell-1380

100 mL

**Store at room temperature****Notes:**

Research Use Only.

## Introduction

**Cellixi-Guard** is an aqueous tissue storage solution that quickly penetrates most tissues, inactivates endogenous RNase, and immediately stabilizes and protects RNA integrity. Fresh tissue samples immersed in Cellixi-Guard can be stored at  $-20^{\circ}\text{C}$  or lower for a long time. Samples are not required to be frozen in liquid nitrogen. Repeated Freeze-thaw don't significantly affect the integrity of the RNA. Samples stored in the Cellixi-Guard can be directly used for RNA extraction using cellixizol RNA extraction reagent or spin column. Cellixi-Guard can be also used for the preservation of tissues such as brain, heart, liver, pancreas, kidney, spleen, testes, muscles and the similar.

## Protocol

### A. Sample Preparation

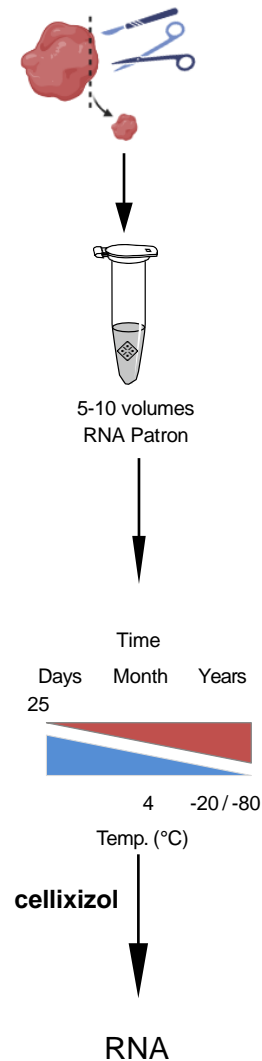
- 1- Animal and plant tissues:** Cut tissues (or plant material) into tissue pieces of about 0.5 cm square and add 5 volumes of Cellixi-Guard.
- 2-Cultured cells and white blood cells:** Collect cells according to standard experimental procedures, wash with PBS, and add 5-10 volumes of Cellixi-Guard.
- 3-Yeast:** Collect about  $10^9$  cells (12,000 RPM for 2 minutes) and discard the supernatant. Add 0.5 to 1 ml of Cellixi-Guard. Yeast cells should be placed in Cellixi-Guard for long-term storage at  $-20/-80^{\circ}\text{C}$ .

### B. Sample Storage

Samples are generally stable for 4 weeks at  $4^{\circ}\text{C}$ . For long-term storage at  $-20^{\circ}\text{C}$  /  $-80^{\circ}\text{C}$ , the sample needs to be immersed in Cellixi-Guard, placed at  $4^{\circ}\text{C}$  overnight, let the solution fully infiltrated into the tissue, and then transferred to  $-20^{\circ}\text{C}$  /  $-80^{\circ}\text{C}$ .

### C. RNA Extraction

- 1- Removal of Cellixi-Guard:** Tissue blocks can be removed directly from the Cellixi-Guard using sterile forceps; cells should be centrifuged ( $>5,000$  g, 5 min) to collect cell pellets. Due to the high density of Cellixi-Guard, it is necessary to use a centrifugal force greater than that of ordinary media.
- 2- The excess Cellixi-Guard in tissue samples can be squeezed out with sterile forceps and the surface liquid is gently aspirated with absorbent paper; immediately placed in the lysate and homogenized.**
- 3- Extract RNA using a variety of common RNA extraction kits i.e Cellixizol Reagent.**



## Precautions

- Make sure to use fresh sample material.
- Do not freeze samples before treatment with Cellixi-Guard solution.
- To minimize RNase activity between sample harvest and treatment with Cellixi-Guard, keep sample in a tube on wet ice ( $0^{\circ}\text{C}$ ). However, it is recommended to immediately treat the samples with Cellixi-Guard after harvesting.



