

RNAfix™ Solution.

Description:

RNAfix™ is an aqueous, non toxic, tissue and cells storage solution intended for the preservation of RNA for later isolation. It is a preservation solution that allows recovery of intact RNA from tissues and cell culture.

Samples in RNAfix™ solution can be stored indefinitely at -20°C with no RNA degradation.

RNAfix™ 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. RNAfix™ compatible with most RNA isolation methods.

Storage

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

Storage in RNAfix™ solution

1. Storage at 4°C.

Samples can be stored in RNAfix™ solution at 4°C for up to 1 month without significant RNA degradation. To ensure rapid and reliable stabilization of RNA even in the inner parts of solid tissues, the sample must be cut into slices less than 0.5 cm thick. Submerge the tissue or cell pellet in the appropriate volume (at least 0.5 ml) of RNAfix™ immediately after harvesting. Cell culture media should be centrifuged and removed from the cell pellet.

Weights and Amounts of RNAfix™ solution

Mouse organ	Weight (mg)	Reagent (ml)
Kidney	180–250	1.8–2.5
Spleen	100–160	1–1.6
Lung	190–210	1.9–2.1
Heart	100–170	1–1.7
Liver	1000–1800	10–18

2. Storage at -20°C.

Incubate samples in RNAfix™ 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.

RNA isolation from samples in RNAfix™

1. Cells

Dilute the RNAfix™ solution with an equal volume of cold Dulbecco's PBS (or other buffer solution) to reduce the density of the solution and immediately centrifuge at normal speeds to pellet the cells. Remove the solution and isolate RNA from cell pellet.

2. Tissue

Using sterile forceps, transfer the tissue from RNAfix™ solution to RNA isolation lysis solution.