



## RNA Later solution

For research use only

Cat No: YT9085

Size: 50 ml

### General description

RNA Later solution is compatible with most RNA isolation methods, including YTzol pure RNA solution and all RNA isolation kits. This solution is a non-toxic tissue storage reagent that rapidly permeates tissue to stabilize and protect cellular RNA in unfrozen samples. It eliminates the need to immediately freeze or process samples. Tissue pieces are harvested and submerged in RNA Later for storage without any effect on the quality or quantity of RNA. RNA Later solution protects RNA in tissues for up to 1 day at 37 °C, 1 week at 25 °C, 1 month at 4 °C and for long term at -20 °C.

RNA Later solution has been widely tested on numerous tissues from vertebrate types, including brain, heart, kidney, spleen, liver, testis, skeletal muscle, fat, lung, and thymus. RNA Later solution is also operative for E. coli, Drosophila, tissue culture cells, white blood cells, and some plants

### Features:

- Quickly infuses tissues to stabilize and protect cellular RNA
- eliminate the need to immediately process tissue samples
- no need to freeze samples in liquid nitrogen
- A non-toxic solution permits downstream tissue processing
- operative for E. coli, Drosophila, tissue culture cells, white blood cells, and some plants.

### Application :

- Protect the quality and quantity of RNA in unfrozen samples
- Tissue RNA storage

### Principle

RNA Later solution is easy to use. only Use RNA Later Solution with fresh tissue. Do not freeze tissues before dipping in RNA Later Solution. Simply cut tissue samples to be stored so they are less than 0.5 cm in at least one dimension and sink in 5 volumes of RNA Later solution. Small organs, such as rat kidney, liver or spleen can be stored in whole in RNA Later solution. When ready to isolate the RNA, remove the tissue from RNA Later solution by PBS buffer and do centrifuge to remove all RNA Later solution . For cell storage, resuspend pelleted cells in a small amount of PBS before adding 5-10 volumes of RNA Later solution. Before preparing RNA, pellet cells and discard supernatant.

### Sample preparation:

- Tissue sample preparation:



Use RNAlater with fresh tissue, do not freeze tissue before storage in RNAlater. Simply cut tissue samples to a maximum thickness of 0.5 cm in any 1 dimension. Put the fresh tissue in 5 volumes of RNAlater, and follow the storage protocol. Any time after storage in RNA later ,if you need you can remove your tissue ,sectioned in to smaller species and returned the sample again in RNA later.

- Culture Cells preparation:

Pellet cells according to the protocol followed by your laboratory. Wash to remove the culture medium (e.g. with PBS). Resuspend the cells in a small volume of PBS, then add 5 to 10 volumes RNAlater.

**Sample storage:**

Incubate samples at 4 °C overnight, then remove them from RNAlater before storage. For tissue culture cells, do not remove the RNAlater, simply freeze the whole solution. subsequently You can store the sample at –80 °C or -20°C for long term storage.

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