

#### **RNA Stabilization Solution for Animal Tissue**

## Product description

RNA Stabilization Solution for Animal Tissue is a non-toxic, non-irritating animal tissue preservation solution. It can quickly penetrate into tissue cells at room temperature and efficiently inhibit RNase activity, thus stably preserving RNA in tissue samples. After obtaining tissue samples, it is not necessary to freeze the samples in liquid nitrogen, which is convenient for subsequent experimental operation. In addition, tissue specimens stored in the protective solution can immediately fix RNA, perfectly preserve the gene expression profile in the tissue, and have the same effect as liquid nitrogen preservation, which can preserve the RNA in the sample for a long time. It is widely used for the stabilization and preservation of RNA in fresh animal tissue samples or cell samples, and in cases where RNA extraction cannot be performed immediately after sample collection.

## **Composition and storage conditions**

Size Components	100 mL	Storage
RNA Stabilization Solution for Animal Tissue	100 mL	4 °C
Shipping: Blue Ice	Shelf life: 2 years	
Experimental operation	APE BIO	

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# **Experimental operation**

#### I Animal tissue sample

1. The tissue is cut to the size of no more than 0.5 cm, and then quickly and completely soaked in 5-10 times the RNA Stabilization Solution (for example, 100 mg tissue is about 0.5-1 mL RNA Stabilization Solution). It can be stored at room temperature for a week or at 4°C for a month, and can be stored at -20°C or -80°C for 3-5 years after at least overnight at 4°C.

<sup>\*</sup>Note: If the tissue mass is too large, the RNA Stabilization Solution reagent may not penetrate fully into the tissue center, resulting in a certain degree of degradation of RNA in the insufficiently penetrated area.

2. Remove the tissue blocks from the RNA Stabilization Solution with clean tweezers, remove the surface residual liquid with paper towels, and then quickly place the tissue blocks in appropriate lysis solution for homogenization or liquid nitrogen grinding. Subsequently, RNA can be extracted by column or Trizol (Item No. K1621) and other extraction reagents.

#### II Cell sample

1. The freshly collected cell samples are cleaned with PBS, then centrifuged at 5000 g for 1-2 min, remove the PBS carefully, and add 5-10 times the volume of RNA Stabilization Solution, avoiding flushing the cells. The cells can be preserved for 1 week at room temperature or 1 month at 4°C. Store at -20°C or -80°C for 3-5 years after at least overnight at 4°C.

\*Note: Try to keep the cell sample in the deposited state to avoid cell resuspension, otherwise it may have some impact on the subsequent RNA yield. When storing samples of white blood cells, bacteria, and fungi, please refer to the cell method.

2. Add the volume of PBS or DEPC water equal to the RNA Stabilization Solution, and collect cell samples by centrifugation at 10,000 g for 1 min. The supernatant is carefully removed, and then the RNA could be extracted by centrifugal column method or Trizol (Item No. K1621).

### Notes

- 1. This product is suitable for stable preservation of RNA in fresh animal tissue or cell samples, and it is not recommended to use this product for storage after sample freezing.
- 2. After storage with this product, the sample may become slightly hard, which is a normal phenomenon and will not affect the homogenization and lysis of tissues during subsequent RNA extraction.
- 3. If the sample needs to be stored at -20°C or -80°C for a long time, it should be stored at 4°C overnight or longer to ensure that the reagent is more fully immersed in the tissue before being transferred to -20°C or -80°C.
- 4. In the case of low temperature storage, there may be crystallization in the reagent when the sample is thawed, which is a normal phenomenon, and the crystallization will dissolve, which will not affect the subsequent extraction effect of RNA.
- 5. This product is for scientific use only.

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