

Product Description

RNA Keeper Tissue Stabilizer is a non-toxic solution that quickly penetrates into tissues, inactivates endogenous RNase, and immediately stabilizes and protects RNA integrity. Immersed in RNA Keeper Tissue Stabilizer, fresh tissue samples can be stored at 37°C for 1 day, 25°C for 1 week, 4°C for 4 weeks or stored at -80 ~ -20°C for a long time, which are not required to be frozen in liquid nitrogen. And repeated freezing and thawing does not significantly affect the integrity of the RNA. Samples stored in the RNA Keeper Tissue Stabilizer can be directly used for RNA extraction using FastPure Cell/Tissue Total RNA Isolation Kit V2 (Vazyme #RC112). RNA Keeper Tissue Stabilizer can be used for the preservation of tissues such as brain, heart, liver, pancreas, kidney, spleen, testes, muscles and the like.

Components

Components	R501-01
RNA Keeper Tissue Stabilizer	100 ml

Storage

Store at 15 ~ 25°C and transport at room temperature.

Applications

Animal tissues, plant materials, cultured cells, white blood cells, yeast.

Notes

For research use only. Not for use in diagnostic procedures.

It is only suitable for soft animal and plant tissues, such as viscera, brain, muscle, young leaves, young stems, etc. If there is hard shell or wax on the surface of animal and plant tissues, RNA Keeper Tissue Stabilizer can't fully penetrate, seriously affecting the effect of RNA protection.

Experiment Process

1. Sample Preparation

- Animal tissues, plant materials: Cut animal tissue (or plant material) into tissue blocks of about 0.5 cm³, and add 5 volumes of RNA Keeper Tissue Stabilizer.
- Cultured cells, white blood cells: Collect cells according to standard experimental procedures, wash with PBS and add 5 - 10 volumes of RNA Keeper Tissue Stabilizer.
- Yeast: Collect about 10⁸ cells (11,200 rpm (12,000 × g), 2 min) and discard the supernatant. Add 0.5 - 1 ml of RNA Keeper Tissue Stabilizer. Yeast cells should be placed in RNA Keeper Tissue Stabilizer for long-term storage, left at room temperature or 4°C for 1 hour, then centrifuged to collect cells (11,200 rpm (12,000 × g), 5 min), discard the supernatant, and store at -80°C.

2. Sample Storage

Samples are generally stable for 4 weeks at 4°C. For long-term storage at -80 ~ -20°C, the sample needs to be immersed in RNA Keeper Tissue Stabilizer, placed at 4°C overnight, then transferred to -80 ~ -20°C after the solution fully infiltrate into it.

3. RNA Extraction

- Removal of RNA Keeper Tissue Stabilizer: Tissue blocks can be removed directly from the RNA Keeper using sterile forceps. Cells should be centrifuged (>7,200 rpm (5,000 × g), 5 min) to collect cell pellets. Due to the high density of RNA Keeper Tissue Stabilizer, it is necessary to use a centrifugal force greater than that of ordinary media.
- The excess RNA Keeper Tissue Stabilizer in tissue samples can be squeezed out with sterile forceps and the surface liquid is gently absorbed by absorbent paper. Then immediately place samples into lysis buffer to be homogenized.
- Extract RNA using a variety of common RNA extraction kits.