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For Research Use Only

FavorPrep™ NApreserve Reagent

Catalogue Number: FNPR1080/FNPR1084

Components : 5 ml/100 ml per bottle

Product description

FavorPrep™ NApreserve Reagent is a nucleic acid stabilization solution that prevents the degradation of nucleic acids in fresh specimens. The reagent permeates the immersed specimen, extending the usability of a sample that would otherwise rapidly degrade without this treatment. This reagent is compatible with various specimens, including cultured cells, tissues, stool, soil, and any other sample that the solution can penetrate. FavorPrep™ NApreserve Reagent offers a reliable and cost-effective, ensuring the integrity of nucleic acids for critical research and diagnostic applications.

Features

- ★ **Compatibility with Various Sample Types:** Suitable for cultured cells, tissue, stool, and soil.
- ★ **Superior Nucleic Acid Stability:** Protects RNA and DNA from degradation in various temperature environments.
- ★ **Flexible Storage Conditions:** Samples can be stored at room temperature for short-term stabilization or at -20°C/-80°C for long-term preservation.
- ★ **Integrated Downstream Solutions:** Enables high-quality RNA and DNA extraction without interfering with molecular biology workflows.

Specification

Format/Principle: Nucleic acid storage reagent

Sample Types: Cultured cells (animal, yeast and bacteria), tissue (animal, plant), stool and soil.

Shipping/Storage Conditions

Ship at ambient. Store at room temperature.

Important notes before starting procedure

● Handling guidelines

1. This reagent contains irritants. Wear gloves, safety glasses, face protection, and a lab coat when handling this reagent.
2. The FavorPrep™ NApreserve Reagent should be kept at room temperatures (15~25°C) before sample treatment.
3. Check the reagent for precipitates before use. If precipitates are detected, warm the reagent at 37°C in a water/dry bath for 5 minutes and agitate gently until dissolved.

● Notes on specimen compatibility

1. **Frozen samples cannot be used.** For optimal results, samples should be collected and treated as soon as possible.
2. Do not exceed the recommended sample size. If necessary, divide the sample into multiple tubes."

Procedure

● Protocol: Sample Stabilization

Culture cells

1. Pellet cells to a microcentrifuge tube.
 - a. Animal cells: Transfer cells up to 5×10^6 cells to a microcentrifuge tube and centrifuge at $500 \times g$ for 3 mins.
 - b. Yeast cells: Transfer cells up to 3×10^8 cells to a microcentrifuge tube and centrifuge at $5,000 \times g$ for 3 mins.
 - c. Bacteria cells: Transfer cells up to 1×10^9 cells to a microcentrifuge tube and centrifuge at $5,000 \times g$ for 3 mins.
2. Remove supernatant or medium.
3. Add 500 μ l of FavorPrep™ NApreserve Reagent.
4. Resuspend the cells completely by pipetting to immerse the sample in the reagent.
5. Follow the instructions in the **Sample Storage** section to store the sample for future use.

Tissues

1. Estimate the sample volume before excision the tissue.
2. Add the appropriate volume of FavorPrep™ NApreserve Reagent into a microcentrifuge tube.
3. Handling of the excised tissue
 - a. Animal tissue: cut tissue into small pieces (≤ 0.5 cm).

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- b. **Plant tissue:** cut plant tissue and remove natural barriers such as waxy coatings.
IMPORTANT: The sample must be less than 0.5 cm thick; when the sample exceeds this dimension, the reagent will fail to permeate the interior parts leading to sample degradation.
- 4. Transfer the tissue to the microcentrifuge tube that contains the Favorprep™ NApreserve Reagent.
IMPORTANT: Immerse the tissue immediately after excision.
- 5. Place the sample with Favorprep™ NApreserve at 4°C for 30 mins.
- 6. Follow the instructions in the **Sample Storage** section to store the sample for future use.

Soil/Stool

- 1. Weigh the appropriate soil or stool according to manufacturer's user manual and judge the volume of the sample.
- 2. Add 4 × volumes of FavorPrep™ NApreserve Reagent. Invert the tube to immerse the sample completely in the reagent.
- 3. Follow the instructions in the **Sample Storage** section to store the sample for further use.

● Sample Storage

Storage Temperature	Sample stabilization time
18~37°C	24 hours
2~8°C	1~4 weeks
-20°C/-80°C	Long-term

NOTE: RNA stability can be maintained without significant degradation for a short period without refrigeration, depending on the specimen and environmental conditions. However, for better preservation, we recommend keeping the sample refrigerated as instructed.

● Nucleic acid isolation from samples stored in FavorPrep™ NApreserve Reagent

Culture cells

- 1. Add 1× sample volume of Nuclease-Free PBS to the sample containing FavorPrep™ NApreserve Reagent.
- 2. Centrifuge the sample.
 - a. **Animal cells:** Centrifuge at 1,000 ×g for 3 mins.
 - b. **Yeast cells:** Centrifuge at 5,000 ×g for 3 mins.
 - c. **Bacteria cells:** Centrifuge at 5,000 ×g for 3 mins.
- 3. Carefully remove supernatant.
- 4. (Optional) For DNA extraction applications, add the 2× sample volume of Nuclease-Free PBS,

centrifuge to pellet the cells, and remove the supernatant.

- 5. Add lysis buffer immediately as instructed in nucleic acid extraction protocol.

Tissues

- 1. Remove the tissue sample with sterile tweezer and gently pat the sample on a paper towel to remove excess solution.
- 2. Transfer sample to lysis buffer and homogenize or grind tissue immediately as instructed in the protocol of nucleic acid extraction kit.

Soil/Stool

- 1. Centrifuge at 12,000 ×g for 3 mins to retrieve the soil or stool sample from FavorPrep™ NApreserve Reagent.
- 2. Remove supernatant. Add lysis buffer immediately as instructed in the protocol of nucleic acid extraction kit.