Apostle MiniMax® cfDNA Preservative (1×, 3 mL)

Cat#: A17911-3, Version: A.00

Product description

Powered by Apostle MiniMax® technology, Apostle MiniMax® cfDNA Preservative offers excellent tool for blood cfDNA preservation during blood collection, storage, and transport. Samples stored with MiniMax® cfDNA Preservative are stable for at least 7 days at room temperatures between 6°C to 37°C, allowing convenient sample collection, storage, and transport.

This is achieved through Apostle MiniMax® cfDNA Preservative's ability to: 1) Prevent the release of genomic DNA from cells in blood during storage and transportation; 2) Preserve existing cfDNA in blood from degradation; 3) Prevent existing cfDNA in blood from cross-linking with other biomolecules (i.e., protein).

The samples stored with MiniMax® cfDNA Preservative are suitable for a broad range of subsequent applications, including sequencing, PCR, etc.

Research Use Only. Not for use in diagnostic procedures.

Capacity

MiniMax® cfDNA Preservative contains 3 mL preservative liquid per tube, can be used for storage of 150 mL human blood.

Contents and storage condition

Contents	Amount	Storage
MiniMax® cfDNA Preservative	3 mL	2 to 30°C Do not freeze In dark

Note: 1. Do not dilute or add other components to MiniMax® cfDNA Preservative.

2. Overfilling or underfilling of tubes will result in an incorrect blood-to-additive ratio and may lead to incorrect analytic results or poor product performance.

3. If cloudiness or precipitate is visible in reagent, or the liquid in the tube is no longer fluid, contact Apostle support team at: support@apostlebio.com

Required materials not supplied

Complementary materials for blood collection, including Non-Additive Blood Collection Tube, Needles (21G), Antiseptic Solution, Tourniquet, Cotton, and Plaster.

Procedure for blood collection

1. Collect blood sample by venipuncture according to CLSI GP41-A6[1] with Non-additive Blood Collection Tube. Blood should be drawn with non-additive tube after the EDTA tube and before the fluoride oxalate (glycolytic inhibitor) tube. If the collection immediately follows a heparin tube in the draw order, we recommend collecting a non-additive or EDTA tube as a waste tube prior to the collection.
2. Fill the tube completely. If it is the first tube for blood drawn, a non-additive or EDTA tube should be partially drawn first as waste tube, in order to eliminate air or "dead space" from the blood collection tubing.
3. Remove the Non-additive Blood Collection Tube from adapter. **Immediately and gently** remove the cap of tube and add 200 uL of MiniMax® cfDNA Preservative per 10 mL of blood sample. Put the cap back and seal it tightly. Mix the blood with preservative, through gentle inversion of the tube by 180 degrees for 10 times. Inadequate or delayed mixing may result in poor performance.
4. After collection, transport, and store samples at room temperature (6 to 37°C).

Note: Do not freeze the tube after blood drawn. Proper insulation may be required for shipment during extreme temperature conditions.

Preparation of plasma from blood

For cfDNA isolation, plasma need to be first separated from blood, according to the procedure below:

1. Centrifuge whole blood sample at 1500-2000 × g for 10 min at room temperature.
2. Transfer the plasma (upper layer) to new centrifuge tubes.
3. Centrifuge the plasma samples at 16,000 × g for 10 min. Alternatively, the plasma samples can be centrifuged at 6000 × g for 20 min.
4. Collect the plasma in new cryogenic tubes.

Note: All centrifuge tubes need to be low binding and DNase-free

5. cfDNA isolation can be performed immediately after plasma preparation. Alternatively, freeze the plasma sample at -20°C or -80°C before cfDNA isolation.

Reference

[1]Clinical and Laboratory Standards Institute. GP41-A6, Procedures for the collection of diagnostic blood specimens by venipuncture. Approved Standard - Sixth Edition