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Apostle MiniMax™ cfDNA Blood Collection Tube

Cat#: A17930, Version: P.02

Product description

Powered by Apostle MiniMax™ technology, Apostle MiniMax™ cfDNA Blood Collection Tube (Apostle MiniMax™ cfDNA BCT) offers excellent tool for blood cfDNA preservation during blood collection, storage and transport. Samples collected in MiniMax™ cfDNA BCT are stable for at least 7 days at room temperatures between 6 °C to 37 °C, allowing convenient sample collection, transport and storage.

This is achieved through Apostle MiniMax™ cfDNA BCT'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 collected with MiniMax™ cfDNA Blood Collection Tube are suitable for a broad range of subsequent applications, including sequencing, PCR, etc.

Research Use Only. Not for use in diagnostic procedures.

Capacity

A set of MiniMax™ cfDNA Blood Collection Tube contains 6 tubes, each is capable of collecting 9 mL human blood. **Single Use Only.**

Contents and storage condition

Contents	Amount	Storage
MiniMax™ cfDNA BCT	6	Room Temperature, 4 °C to 30 °C; Do not freeze; Keep from light.

Note: 1. Do not remove the tube cap before use, do not dilute or add other components to MiniMax™ cfDNA BCT. Do not use tubes for collection of materials to be injected into patients.

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 of empty tube, or the liquid in the empty tube is no longer fluid, contact Apostle support team at: support@apostlebio.com

Required materials not supplied

Complementary materials for blood collection, including: 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 Apostle MiniMax™ cfDNA Blood Collection Tube. MiniMax™ cfDNA BCT should be drawn after the EDTA tube and before the fluoride oxalate (glycolytic inhibitor) tube. After blood drawn into a heparin tube, we recommend add a non-additive or EDTA tube as a waste tube prior to blood drawn into MiniMax™ cfDNA BCT.

   Note: The MiniMax™ cfDNA BCT contains chemical additives, and it is important to prevent backflow of liquid from the tube during sample collection process.

2. Fill the tube completely. If MiniMax™ cfDNA BCT 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 MiniMax™ cfDNA BCT from adapter. **Immediately** mix the blood with additives in the tube, through gentle inversion of the tube by 180 degree for 10 times. Inadequate or delayed mixing may result in poor performance.

4. After collection, transport and store samples at room temperature (6 °C 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 1500-2000g for 10 min at room temperature.

2. Transfer the plasma (upper layer) to new centrifuge tubes.

3. Centrifuge the plasma samples at 16000g for 10 min. Alternatively, the plasma samples can be centrifuged at 6000g for 20min.

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.