

Document Title: Whole Blood Sampling and Preservation Procedure

Controlled: Yes, with red stamp present

Controlled By: Quality Manager

Prepared By: _____ Date: _____

Approved By: _____ Date: _____

A. PURPOSE:

To preserve whole blood samples for further analysis.

B. RESPONSIBILITY:

Forensic Science Examiners from the Connecticut State Forensic Science Laboratory who have been trained in the discipline of whole blood sample preservation according to SOP-FB-31 (Training Manual).

C. SAFETY:

Use appropriate measures for the proper handling of a biohazardous material according to SOP-GL-2 (Safety Manual).

D. DEFINITIONS:

1. FTA: Fast Technology for Analysis of Nucleic Acids
2. EDTA: Ethylenediaminetetraacetic Acid
3. PTT: Purple Top Tube
4. RTT: Red Top Tube

E. PROCEDURE:

1. Materials:
 - a. FTA[®] Micro cards with provided foil pouches
 - b. Microcentrifuge tubes
 - c. Micropipet and tips
 - d. Wooden sticks
 - e. Desiccant packets
 - f. 20% bleach
2. Procedures:
 - a. Record all written information on the appropriate Quality Record Worksheet.
 - b. Label the card with the Laboratory ID#, item #, donor name, date, initials of examiner and the type of tube (PTT, RTT).

- E. 2. c. Label the foil pouch with the Laboratory ID#, item #, donor name and type of tube.
- d. Prior to sample removal:
 - aa. For samples collected in purple top tubes (EDTA) or other tubes containing anticoagulant, thoroughly mix blood.
 - bb. For samples collected in red-top tubes (no anticoagulant), break up the blood clot with wooden sticks.
- e. Remove approximately 125µl of the whole blood with a micropipet and place on an FTA[®] card, making the stain as concentrated as possible.
 - aa. Air dry the bloodstain card in the designated cabinet.
 - bb. Clean the micropipet after each use with 20% bleach.
 - cc. After drying, place the card in the labeled foil pouch with a desiccant packet. Seal the pouch and initial the seal.
- f. Create the bloodstain in LIMS and print out a barcode. Place the barcode on the pouch. Transfer and store the bloodstain in the "FTA Blood Storage" location.
- g. When necessary, aliquot approximately 125µl of whole blood into a labeled microcentrifuge tube, create in LIMS and store in the freezer.
- h. For OCME bloods submitted with additional autopsy samples, refer to the Work Instructions for OCME Autopsy Sample Examination described in SOP-FB-31 (Training Manual).

F. REFERENCES:

- 1. Whatman FTA cards provided Technical and Protocol Information sheet.
- 2. SOP-GL-2 (Safety Manual).