

NC SBI: Forensic Biology Section	DNA SOP	Effective Date: July 19, 2004
Title: FTA DNA Extraction		Revision 04

1. Place sample(s) into an microcentrifuge tube.
2. Add 200 Φ l of FTA Purification Reagent to each tube. Cap each tube and vortex 1 to 2 seconds at low speed.
3. Allow the tube(s) to sit for 5 minutes at room temperature with a second brief vortex halfway through the incubation.
4. After the 5 minute incubation, vortex for a third time and then carefully remove as much of the reagent as possible.
5. Repeat steps 2 through 4 an additional two times for a total of three washes with the FTA Purification Reagent.
6. After FTA Purification Reagent has been removed for the third time, add 200 Φ l of TE. Cap each tube and vortex 1 to 2 seconds at low speed.
7. Allow the tubes to sit for 5 minutes at room temperature with a brief vortex half way through the incubation.
8. Draw off the TE and replace with an additional 200 Φ l of TE. Cap each tube and vortex 1 to 2 seconds at low speed.
9. Allow the tubes to sit for 5 minutes at room temperature with a brief vortex half way through the incubation.
10. Draw off the TE and allow the FTA paper punch to completely air dry. This will require approximately 1 hour at room temperature. Alternatively, the drying can be accelerated by placing the tube with the punch at 60°C for 30 minutes.
11. The complete PCR amplification mix is directly added to the punch containing the purified immobilized DNA.

NOTE: The DNA extracted using the FTA protocol doesn't allow for quantitation prior to amplification. Analysts shall use a 1 mm Harris punch to sample known blood stains, since the approximate yield of DNA is 1 ng, our target level of template.

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Revision History		
Effective Date	Revision Number	Reason
Unknown	00	Original Document for DNA Tech Procedures
January 4, 2002	01	Addition of Speed-Vac Procedure (Change in DNA Technical Procedures)
November 26, 2002	02	Procedure Updates; Collation of Procedures and use of WP Outline; Change in page numbering (Change in DNA Technical Procedures)
August 7, 2003	03	Addition of Table of Contents; no substantive changes in any procedure. (Change in DNA Technical Procedures)
July 19, 2004	04	Made "FTA DNA Extraction and Amplification" SOP a separate document. No change in SOP.

Approval Signatures	Date
Author/Title (Print)	
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