

## FTA® Elute Cards

Whatman Cat. No.: WB120410, WB120401, WB120461

### **DESCRIPTION:**

FTA Elute Cards are designed for room temperature collection, shipment, archiving, and purification of nucleic acids from biological samples for PCR analysis. FTA Elute Cards are impregnated with a patented chemical formula that lyses cells and denatures proteins upon contact. Nucleic acids are protected from microbial and fungal attack. FTA Elute Cards are available in several formats. To use FTA Elute Cards, simply apply biological sample, air dry at room temperature, then remove a small disk (3mm disk). The disk is then washed and the DNA eluted in water which is then used as a source of template in PCR-based analysis.

### **PRECAUTIONS:**

**HANDLING:** Always wear gloves to avoid contamination of FTA Elute Cards. Follow universal precautions when handling biological specimens.

**STORAGE:** Do not open the packages before use. Store the unused cards in original packaging at room temperature in a dry, clean environment. After applying samples, allow the FTA Elute Cards to dry, then store in a Multi-barrier pouch at room temperature in a dry environment. Dried sample cards can be stored for long period of times in a Multi-barrier pouch with a desiccant packet.

### **INSTRUCTIONS:**

#### Application of Biological Samples:

1. Label the FTA Elute Card with the appropriate sample identification. Use one card for each biological sample.
2. Pipet the biological sample (40µl per 11 mm circle) onto the card in a concentric circular motion within the printed circle area. Avoid "puddling" of the liquid sample, as it will overload the chemicals on the card. Also, do not rub or smear the blood onto the card
3. Samples applied to FTA Elute Cards are ready for immediate room temperature storage. Note: If samples are to be processed shortly after application on the FTA Elute Card, allow the sample to dry completely for at least 3 hours at room temperature prior to punching. To reduce drying time, spotted FTA Elute cards can be placed at 80 °C for 15-20 minutes
4. If the biological sample is blood, dried blood spots will appear darker than freshly spotted ones
5. The sample is now ready for downstream processing or archiving

#### Archiving of samples on FTA Elute Cards:

Biological samples applied to FTA Elute Cards should be archived at room temperature in a Multi-Barrier Pouch (Whatman Cat. Nos: WB100036 or WB100037) with a desiccant packet (WB100003) or stored in a humidity-controlled, cool, dry environment.

#### Preparation of Sample DNA for Downstream Analysis:

1. Remove one 3mm sample disk from the center of the blood spot using the 3mm Harris Uni-Core device (Whatman Cat. No. WB100039) and transfer into a 1.5 ml microfuge tube
2. Add 500 µl of sterile H<sub>2</sub>O to the tube and immediately pulse vortex 3 times, for a total of 5 seconds.  
*Note: If the biological sample was blood and the wash is pink, the blood sample was not completely dried. Discard these punches and thoroughly dry the remaining blood spots before re-punching the card*
3. Using sterile technique, immediately transfer disk to a 0.5ml microfuge tube containing 30 µl of sterile H<sub>2</sub>O. Ensure the disk is completely immersed in the H<sub>2</sub>O by briefly centrifuging the tube for 10 seconds
4. Transfer the tube to a heating block at 95°C for 15 – 30 min
5. At the end of the incubation period remove the sample from the block and pulse vortex, or gently tap, the sample approximately 60 times
6. Briefly centrifuge for 30 seconds, to separate the matrix from the eluate. The eluate now contains the purified DNA
7. Using a sterile pipette tip, gently remove the FTA Elute matrix disk and discard.
8. Store the eluted DNA at -20°C until required  
*Note: To prevent shearing of DNA caused by repeated freeze-thaw cycles, store DNA in smaller aliquots*

#### Downstream PCR Applications:

The eluted DNA is now ready for PCR analysis or quantitation. Assuming a 25µl reaction, we recommend using 2.5 µl of the eluted DNA.

#### **CONTACT INFORMATION:**

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