

Whatman FTA®

Collect, archive, transport and purify nucleic acids all at room temperature

Whether you're in a laboratory or deep in a rain forest, Whatman FTA provides a remarkably easy way to collect and isolate nucleic acid samples for analysis. Simply apply virtually any type of biological sample to the FTA matrix, and the nucleic acids are instantly captured and stabilised. Pathogens are inactivated, making samples safe to handle and ship. Store samples, including clones, at room temperature and analyse whenever you're ready. Try FTA, and you'll soon find it's an indispensable part of your nucleic acids toolbox.

Features and Benefits

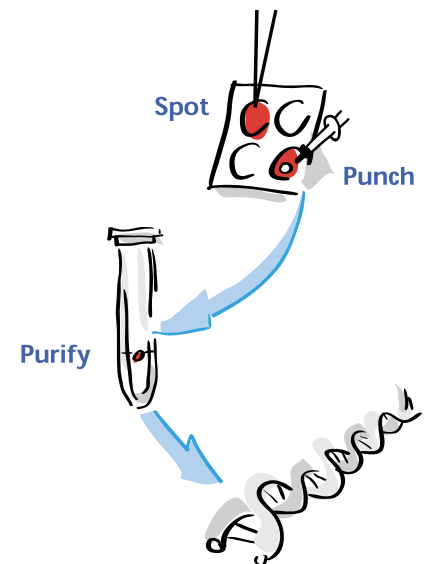
- **Simple collection** Protection of nucleic acids from degradation at room temperature allows for convenient collection in the laboratory or the field.
- **Room temperature storage** Nucleic acids are automatically stabilised without the need for refrigeration.
- **Pathogen inactivation** Cells are automatically lysed on contact with the FTA matrix. Pathogens become inactivated, making samples safe to handle and ship via standard mail.
- **Fast purification** Nucleic acids are purified on the FTA Card in three simple steps, all in a single tube at room temperature. DNA remains immobilised on the matrix and is ready for PCR or other amplification techniques.
- **Automatable** Automation speeds the handling of multiple FTA punches and standardises DNA purification. Punches can be easily washed and prepared for PCR on a variety of liquid handling instruments.

Applications

- Blood, plant, insect, viral and bacterial analysis
- Genetic identification
- Ideal for clones
- Diagnostic and clinical applications
- Biosafety, food safety and environmental analysis
- HLA typing
- Animal breeding studies
- Molecular identification



Three easy steps to pure nucleic acids



Whatman®

FTA – A Highly Flexible Technology used Widely in a Range of Industries

FTA technology has been embraced by a wide range of industries across the globe. Pharmaceutical companies use FTA to collect and archive human DNA samples for clinical drug trials. Law enforcement agencies use FTA to collect and archive DNA samples from convicted offenders. Nature conservationists use FTA to collect bird DNA from jet engines to determine the flight patterns of specific species. Scientists hunting for new plant species use FTA in the field to

collect and safely transport samples. Governmental agencies use FTA to sample food products while farmers use FTA to track diseases within multiple herd generations.

While the range of applications is large, they all share a common element: simplicity. Whatman FTA helps scientists speed their research and achieve their goals.

Use with virtually any cell type

The following is a partial list of the cell types that can be applied to FTA Cards:

- Blood
- Cultured cells
- Buccal cells
- Plant tissue
- Bacteria
- Plasmids
- Micro-organisms
- Solid tissue
- Viral particles
- M13 plaques

FTA Cards are available in either white or pink (Indicating) formats. White FTA Cards are recommended for blood samples, plant tissues and other easily identified samples. Indicating FTA Cards are pink and turn white upon sample addition. Indicating FTA Cards are recommended for buccal cells, cultured cells and other clear samples.

Store nucleic acids at room temperature for years

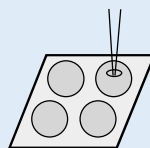
Genomic DNA stored on FTA Cards at room temperature for more than 14 years has been successfully amplified by PCR.

No other product can make that claim. FTA Cards offer a compact room temperature storage system that reduces the need for precious freezer space, improves sample accessibility and reduces storage costs.

Captured nucleic acid is ready for downstream applications in less than 30 minutes

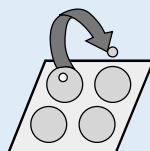
Captured nucleic acid is ready for purification when you are. Just take a sample disk from the FTA Card, wash with FTA Purification Reagent and rinse with TE⁻¹ buffer. The washed disk is ready to use in applications such as PCR, RFLP analysis and RT-PCR.

FTA DNA PURIFICATION PROTOCOL



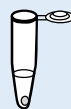
Sample Application

Apply specimen and allow to dry completely.



Disk Removal

Punch a disk out of the sample area on the FTA Card.



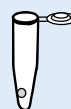
FTA Purification Reagent Washes

Place the disk in a PCR tube and wash three times with FTA Purification Reagent. Discard used reagent after each wash.



TE⁻¹ Rinses

Wash twice with TE⁻¹ buffer (10 mM Tris, 0.1 mM EDTA, pH 8.0) and discard used buffer after each wash.



Drying Step

Dry disk in PCR tube.



Direct to PCR

Add PCR master mix directly to the disk and amplify.

FTA Cards, Reagent, Accessories and Kits



FTA Cards

FTA Cards are available in 1, 2, 3 and 4 part configurations. Custom configurations are available upon request.

FTA Classic Card

Four sample areas for storage of up to 500µL whole blood or 100µL plant homogenate per card. Convenient for multiple applications of the same specimen or collection of multiple animal or plant samples. Also available in Indicating (pink) FTA format.

FTA Mini Card

Two sample areas for storage of up to 250µL whole blood or 50µL plant homogenate per card. Convenient for protocols that require different locations for testing and archiving samples. Also available in Indicating (pink) FTA format.

FTA Micro Card

One sample area for storage of up to 125µL whole blood or 25µL plant homogenate per card. Recommended when only one sample is needed. Also available in Indicating (pink) FTA format.

FTA Gene Card

Three sample areas in a card frame for storage of up to 225µL whole blood or 30µL plant homogenate per card. Can be run in most automatic dispensing/pipetting systems when used with the FTA Gene Card Tray.

CloneSaver™ Card

Designed for the collection, storage and purification of plasmid and BAC DNA from bacterial clones. DNA is stable at room temperature for at least 5 years (real-time data). Available in a 96 well format for high throughput applications.

PlantSaver™ FTA Card

Plant friendly FTA Card, in a Classic Card format. Features a laminated flap that allows you to vigorously pound the plant sample into the FTA matrix without damaging the FTA Card.

FTA Reagent, Accessories and Kits

FTA Purification Reagent

Removes heme, PCR inhibitors and other potential contaminants to ensure superior quality DNA for downstream analysis.

FTA Gene Card Tray

Holds two FTA Gene Cards for use in automatic liquid handling systems.

FTA Kit

Includes a 25-card supply of FTA Micro Cards; two vials of purification reagent (25mL); two Harris Uni-Core Punches; a cutting mat and instructions.

FTA Starter Pack

Provides a sample of FTA products, including one FTA Classic Card; one FTA Mini Card; one FTA Micro Card; one Indicating FTA Mini Card and one Indicating FTA Micro Card. Pack also includes two foam-tipped applicator swabs; one multi-barrier pouch and desiccant; one vial of purification reagent (25mL); two Harris Uni-Core Punches; a cutting mat and instructions.

Sterile Foam Tipped Applicator

Easy-to-use applicator for the non-invasive collection and transfer of buccal cells to FTA Cards.

Harris Micro Punches, Disposable Uni-Core Punches and Cutting Mat

For the precise sample disk removal from FTA Cards. The 1.2mm punches are recommended for use with whole blood and samples with high DNA content. The 2.0mm punches are recommended for use with buccal cells, plasmids and samples with lower DNA content.

Multi-Barrier Pouches

For transporting or storing FTA Cards. Protects cards from environmental contamination. Tamper-evident seal maintains sample security for forensics samples. A resealable pouch is also available when multiple access to FTA Cards is needed.

FTA Card Mailer

A rigid protective card mailer for transporting FTA Cards without biohazard labelling.

Storage Desiccant Packets

Ensure that FTA Cards remain dry during transport or storage. Contains indicator that changes colour to verify moisture absorption.

CloneSaver Starter Kit

Includes two CloneSaver Cards; two Harris Uni-Core Punches (2mm); a cutting mat and instructions.