July 2021

Product Sheet

QIAcard® FTA® CloneSaver

Contents

QIAcard FTA CloneSaver	5 cards

Description

The QIAcard FTA CloneSaver format is designed for the long-term, room-temperature storage of plasmid and BAC DNA clones. The unique FTA technology enables years of ambient clone archiving that condenses the functions of –80°C freezers and purification kits down to the size of an index card. FTA technology is capable to lyse cells on contact and sequester the DNA regardless of glycerol content or growth media. Once separate from the lysed cell and bound to the CloneSaver fibers, the DNA is ready for room temperature storage in a lab drawer, card catalog, or lab notebook. The QIAcard FTA CloneSaver format protects nucleic acids from nucleases, oxidation, UV damage, and microbial and fungal attack.

Samples that can be applied to QIAcard FTA CloneSaver (cat. no. WB120028) include overnight cultures of bacteria, suspended colonies, glycerol stocks, and purified plasmid DNA. The sample area is formatted in a 96 well configuration. Samples applied to the card as directed will not contaminate other samples in adjacent circles. The pink-colored QIAcard FTA CloneSaver changes to white upon application of liquid samples allowing easy identification of sample location. Samples stored on QIAcard FTA CloneSaver and enclosed in a multi-barrier pouch may be shipped to collaborators through the post.

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DNA stored on the QIAcard FTA CloneSaver format is suitable for many common downstream applications including PCR and transformation (electroporation and heat-shock) rolling circle amplification and sequencing applications.

Shipping and Storage

The QIAcard FTA CloneSaver is shipped at room temperature (15–25°C). Store unused cards in original packaging in a cool, dry, clean environment. After applying samples, allow them to dry, and then store securely at room temperature in a dry environment, away from food or feedstock. When stored correctly, the QIAcard FTA CloneSaver is good until the expiration date printed on the kit box lid.

Symbols

Catalog number

Lot number

To be used by

Temperature limitations

Legal manufacturer

Quality Control

In accordance with QIAGEN's ISO-certified Quality Management System, each lot of the QIAcard FTA CloneSaver is tested against predetermined specifications to ensure consistent product quality.

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Safety Information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate safety data sheets (SDSs). These are available online in convenient and compact PDF format at **www.qiagen.com/safety**, where you can find, view, and print the SDS for each QIAGEN kit and kit component.

Materials Required

- QIAcard FTA CloneSaver (cat. no. WB120028)
- UniCore Punches 2.00 mm (cat. no. WB100029 or WB100076)
- Cutting Mat 6" x 8" or 2" x 3" (cat no. WB100020 or WB100088)
- TE Buffer (10 mM Tris, 0.1 mM EDTA, pH 8.0)
- Optional: Multi-Barrier Pouches, Reseal 7" x 7.37" (WB100024)
- Optional: Indicating Desiccant Pack (WB100003)

Sample Application and Storage of the QIAcard FTA CloneSaver

1. Apply up to 7 µl of culture, suspended colony, glycerol stock, or purified plasmid/BAC to a spot of a QIAcard FTA CloneSaver or up to 65 µl for QIAcard FTA Indicating formats.
2. Pink coloration will turn white where sample is applied.
3. Allow to dry and store in a dry environment, desiccated if using glycerol or if long-term storage is desired.

   Note: The recommended drying time for samples is not less than 3 h at room temperature. This period has been determined by following the drying time of 125 µl of whole human blood at 18–22°C and 60% relative humidity using sample weight loss method. Users will need to determine whether different sample types or volumes or different local conditions will require longer or shorter drying times. Prior to shipping of samples, it is highly recommended that they be allowed to dry completely. Do not heat to shorten the drying period.
4. For transportation of the QIAcard FTA CloneSaver, the use of Multi-Barrier Pouches (cat. no. WB100024) and Desiccants (cat. no. WB100003) is recommended.

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Protocol for PCR analysis

Sample preparation

Follow steps 1–4 of the protocol for Sample application and storage of QIAcard FTA CloneSaver and continue as follows on each protocol.

1. Punch out a 2 mm disk from the QIAcard FTA CloneSaver and place the punched disk into a single tube or vessel with 250 µl capacity.
2. Briefly rinse the disk with 200 µl of TE Buffer (10 mM Tris·Cl, 0.1 mM EDTA, pH 8.0) by aspirating up and down four times and discarding the rinse.
3. Repeat step 2 once for a total of 2 rinses. Be sure to remove any standing rinse around the disk.

   Note: At this point, the plasmid/BAC DNA is clean of any cell debris that may have been present and the disk is clean of any residual FTA chemical. The clone of interest is ready to be analyzed via PCR.

Direct PCR using the rinsed disk

4. Once all standing liquid is removed, add PCR master mix directly to the rinsed disk and proceed according to the manufacturers protocol.

Elution of DNA

5. Once all standing liquid is removed, add 5–10 µl of TE Buffer or diH_2O to the punched disk and incubate at room temperature for 5 min (water is suitable only if the eluate is not to be stored).
6. Add 1 µl of eluate to 25 µl PCR reaction and proceed according to the manufacturer's protocol.

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Protocols for Transformation

Sample preparation

Follow steps 1–4 of the protocol for Sample application and storage of QIAcard FTA CloneSaver and continue as follows on each protocol.

7. Punch out a 2 mm disk from the QIAcard FTA CloneSaver and place the punched disk into a single tube or vessel with 250 µl capacity.
8. Briefly rinse the disk with 200 µl of TE Buffer (10 mM Tris·Cl, 0.1 mM EDTA, pH 8.0) by aspirating up and down four times and discarding the rinse.
9. Repeat step 8 once for a total of 2 rinses. Be sure to remove any standing rinse around disk.

   Note: At this point, the plasmid/BAC DNA is clean of any cell debris that may have been present and the disk is clean of any residual FTA chemical. The clone of interest is ready for transformation.

Electroporation from eluate

10. Once all standing liquid is removed from the disk after the final rinse, add 5 µl of TE Buffer or diH_2O to the punched disk and incubate at room temperature for 5 min (water is suitable only if the eluate is not to be stored).
11. Add 2 µl of eluate and 20 µl of electro-competent cells to a chilled microfuge tube.
12. Incubate on ice for 10 min and proceed as normal.

Direct electroporation from the disk

13. Once all standing liquid is removed from the disk after the final rinse, add 20 µl of electro-competent cells and perform electroporation as usual.

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Heat-shock transformation from eluate

14. Once all standing liquid is removed from the punched disk after the final rinse, add 5 µl of TE Buffer or diH_2O to the disk and incubate at room temperature for 10 min (water is suitable only if the eluate is not to be stored).
15. Place the tube containing the disk and total amount of eluate on ice for 5 min.

    Note: Heat-shock transformation works best when all available/eluted plasmid DNA is added to the reaction
16. Add chemically competent cells directly to tube and perform heat shock as usual.

Ordering Information

Product	Contents	Cat. no.
QIAcard FTA CloneSaver (5)	5 cards, 96 sample areas per card	WB120028
Related products		
UniCore Punch Kit 2.00 mm (4)	4 pieces (including 2 cutting mats)	WB100029
UniCore Punches 2.00 mm	25 pieces	WB100076
Cutting Mat 2.5" × 3.0"	For clean sample cuts from FTA/FTA Elute Cards	WB100088
Cutting Mat 6.0" × 8.0"	For clean sample cuts from FTA/FTA Elute Cards	WB100020
Multi-Barrier Pouches, Reseal 7" x 7.37", Resealable	50 pouches (7 x 7.37 inch/17.8 x 18.7 cm)	WB100024
Indicating Desiccant Pack (1000)	Desiccant packets (1 g) with indicator to ensure that FTA Cards remain dry during transport or storage. A color change from blue to pink indicate absorption of moisture.	WB100003

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QIAcard FTA CloneSaver is intended for molecular biology applications. This product is not intended for the diagnosis, prevention, or treatment of a disease.

All due care and attention should be exercised in the handling of the products. We recommend all users of QIAGEN® products to adhere to the NIH guidelines that have been developed for recombinant DNA experiments, or to other applicable guidelines.

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Document Revision History

Date	Changes
07/2021	Initial revision

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