QIAcard® FTA® PlantSaver

More than Plants!

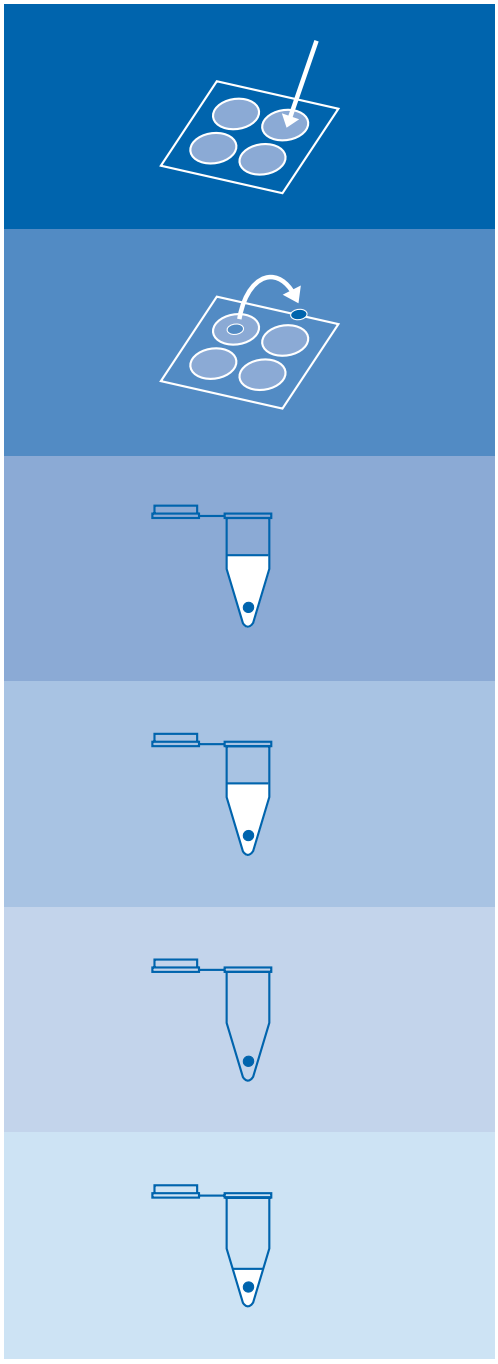
The card offers a reliable laboratory and field collection tool suitable for use in plant phylogenetics and population genetics. Proven nucleic acid storage and extraction methods enable barcoding and molecular systematics in insects, plants and fungi.

- Compact storage and transport at room temperature
- Detection of plant- or insect-transmitted pathogens with less biohazard risks due to e.g., virus or bacteria inactivation
- Nucleic acid extraction methods require fewer hazardous chemicals (no phenol/chloroform or CTAB)
- FTA technology enables safe storage and analysis of precious samples for detecting GMOs or to provide DNA identification information to law enforcement e.g., *Cannabis* strains.
- Suitable for downstream procedures including end-point PCR, STR analysis and next-generation sequencing studies

QIAcard FTA Technology

FTA (Flinders Technology Associates) is a chemically coated cellulose matrix. The impregnated chemistry is capable of lysing cells upon contact and denatures proteins. Released DNA is trapped on the card and protected from degradation.

Analysis Protocol for QIAcard FTA PlantSaver



FTA Wash Buffer Method

1. Sample press

Press solid tissue on the card or apply homogenate

2. Disc removal

Punch a disc out of the FTA matrix impregnated with sample material using e.g. a UniCore Puncher

3. FTA washes

Place the disc in a PCR tube and wash twice with QIAcard FTA Wash Buffer

4. TE^{-1} rinses

Wash twice with TE^{-1} buffer and discard used reagent after each wash

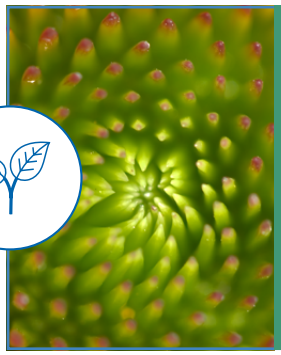
5. Drying

Completely dry the disc in the PCR tube

6. Direct to PCR

Add the PCR master mix directly to the disc to perform a direct PCR analysis

Plant samples



Features

- Analysis of plant DNA/RNA & associated viral RNA
- Reduced propagation capability of plant material important for national import restrictions and transport between states and countries
- DNA stabilization allows resampling of material for precious samples e.g., Cannabis strains

References

Aggrotis capillaris[1] (Common bent)
Agrostis stolonifera[1] (Bentgrass)
Asclepias syriaca[2] (Common milkweed)
Magnolia virginiana[2] (Sweetbay magnolia)
Opuntia laevis[2] (Prickly pear)
Petunia × hybrida[3] (Garden petunia)
Pinus virginiana[2] (Virginia pine)
Ratibida pinnata[2] (Prairie coneflower)
Sorghum bicolor[4] (Great millet)
Terminalia arjuna[5] (Arjun tree)

Insect samples

Features

- Insect DNA and insect-transmitted pathogen detection possible even on site with e.g., loop-mediated isothermal amplification (LAMP)
- Protein denaturing and enzyme inactivation
- Endogenous cellular material released by cell lysis

References

Crematogaster osakensis[9] (Valentine ant)
Liriomyza sativae[8] (Leafminers)
Macrosteles quadrilineatus[6] (Aster leafhopper)
Macrotermes gilvus[7] (Hagen termite)
Macrotermes carbonarius[7] (Hagen termite)
Nasutitermes corniger[7] (Motschulsky termite)

Fungi samples

Features

- Direct sample transfer from fresh or dried basidioma to the card
- Protein denaturing and enzyme inactivation
- Easy monitoring of e.g. fungal associated root rot diseases

References

Cyphelloid fungi[11] (Cantharellales)
Filamentous fungi[10] (Mushrooms)
Fusarium graminearum[14] (Gibberella zeae)
Mycosphaerella cruenta[13] (Cowpea leaf spot)
Phytophthora[14] (Oomycete)
Pseudocercospora griseola[12] (Angular leaf spot)

Learn more about our QIAcard FTA PlantSaver cards, including instructions for use.
Visit **www.qiagen.com/products/human-id-and-forensics/**

The mentioned samples are an example of already analyzed materials without any claim to comprehensiveness
Instructions for use to be found at www.qiagen.com

Ordering Information

Product	Pack size	Cat. no.
QIAcard FTA PlantSaver	100 cards	WB120065
QIAcard FTA Wash Buffer	25ml bottle	WB120112
QIAcard FTA Wash Buffer	500ml bottle	WB120204
Indicating Desiccant Pack	Desiccant packets (1g) with colour indicator	WB100003
Multi-Barrier Pouch (4.37" x 6.5")	100 pouches (4.37 "x 6.5"/11.1 x 16.5 cm)	WB100037
UniCore Punch Kit 2.00 mm	4 pieces (including 2 cutting mats)	WB100029
Cutting Mat (2.5″ x 3.0″)	For clean sample cuts from FTA/FTA Elute Cards	WB100088
Cutting Mat (6″ x 8″)	For clean sample cuts from FTA/FTA Elute Cards	WB100020

References

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