A&A BIOTECHNOLOGY
innovating life science

Manual

MagnifiQ™ 1 Plant DNA instant kit

Kit for automated, magnetic isolation of genomic DNA from plant tissue in the strip format. Contains ready-to-use, reagent-filled stripes and all necessary consumables. The strip format enables the isolation of a single sample per purification run.

catalog #	size	compatible devices *
650A-1V-32	32 isolations	Auto-Pure S32 Auto-Pure Mini
650A-1V-160	160 isolations	Auto-Pure S32 Auto-Pure Mini

*** Compatible devices**
The kit has been tested with specific Allsheng brand isolation devices. This does not preclude it from working with other devices. If your device is not listed, please contact us at info@aabiot.com.

For research use only.

Guarantee
A&A Biotechnology provides a guarantee on this product.
The company does not guarantee the correct performance of this kit in the event of:

- not adhering to the supplied protocol
- use of not recommended equipment or materials
- use of other reagents than recommended or which are not a component of the product
- use of expired or improperly stored product or its components

Table of Contents

Advantages

- MagnifiQ™ 1 Plant DNA instant kit does not require initial preparation of buffers. Just add prepared samples to the strip and get extracted material within approximately half an hour.
- It enables isolation of different samples with universal kit and automated extraction programme.

Specification

protocol time	~31 min
sample size	• dry, powdered plant tissue: 20 - 50 mg • fresh or frozen, powdered plant tissue: 40 - 80 mg • dry, unpowdered plant tissue: 20 - 50 mg • fresh or frozen, unpowdered plant tissue: 40 - 80 mg
elution volume	100 µl
elution solution	Tris buffer
binding capacity	up to 60 µg
downstream applications	sequencing, qPCR, RT-PCR

Description

MagnifiQ™ 1 Plant DNA instant kit is designed for genomic DNA isolation from plant tissue.
The isolated material is perfect for further analyzes and tests by PCR and real-time PCR methods and for sequencing.

The **MagnifiQ™** product series is based on the automated isolation of nucleic acids with use of magnetic beads. This method significantly shortens working time and reduces risk of mistake in comparison to manual methods.

Contents

	650A-1V-32		650A-1V-160		
component	**quantity**	**cat #**	**quantity**	**cat #**	**storage**
XS-PT - extraction strip	4 x 8 pcs	K-S1V22XPT	20 x 8 pcs	K-S1V22XPT	15–25 °C
LPE lysis buffer	28 ml	K-LPE-28	140 ml	K-LPE-140	15–25 °C
Proteinase K	1.1 ml	K-PRK-11A	3 x 1.1 ml	K-PRK-11A	2–8 °C*
L3P precipitation solution	4 ml	K-L3P-4	18 ml	K-L3P-18	15–25 °C
tip comb 8	8 x 2 pcs	K-C8U-2	40 x 2 pcs	K-C8U-2	15–25 °C

* Proteinase K can be stored at 15-25 °C for up to 12 months.

Additional equipment and reagents

Necessary

- 1.5 ml Eppendorf tubes (sample lysis)
- automated pipette
- pipette tips
- Beadbeater
- centrifuge
- thermoblock

Optional

- RNase (10 µl per sample), cat # 1006-10
- bead-beater tubes M45 (metallic beads), cat # K-2M-25

Material preparation

Dry, powdered plant tissue: 20 - 50 mg
Fresh or frozen, powdered plant tissue: 40 - 80 mg

1. Transfer appropriate amount of powdered plant material to the 1.5 ml sterile Eppendorf tube (not included).
2. Add **800 µl** of **LPE** buffer and **20 µl Proteinase K.**
3. Vortex the sample for **10 s** and incubate for **10 min** at **50 °C** with shaking at **1200 RPM.**
4. Centrifuge for **5 min** at **14 000 RPM**.
5. Transfer **500 µl** of supernatant to the 1.5 ml Eppendorf tube (not included).

   Optional RNA removal. Add **10 µl** of **RNase** (cat # 1006-10). Vortex the sample for 10 s and Incubate for **10 min** at **50 °C** with shaking at **800 RPM**.
6. Add **100 µl** of **L3P** precipitation solution and mix by inverting the tube three times.
7. Put on ice for **3 min**.
8. Centrifuge for **10 min** at **14 000 RPM**.
9. **Attention.** In the isolation protocol, use **400 µl** of supernatant as the sample.

   Follow point 1. of the protocol.

Dry, unpowdered plant tissue: 20 - 50 mg
Fresh or frozen, unpowdered plant tissue: 40 - 80 mg

Additional reagents you will need:

- **bead-beater tubes M45 (metallic beads)**, cat # K-2M-50

1. Transfer the appropriate amount of cutted but unpowdered plant material to a **bead-beat tube** containing 2 metallic beads.
2. Run **3** cycles for **20 s** at maximum power with **1 min** rest time in between to enable the sample to cool down to room temperature.
3. Add **800 µl** of **LPE** buffer and **20 µl** of **Proteinase K.**
4. Vortex the sample for **10 s** and incubate for **10 min** at **50 °C** with shaking at **1200 RPM.**
5. Centrifuge for **5 min** at **14 000 RPM**.
6. Transfer **500 µl** of supernatant to the 1.5 ml Eppendorf tube (not included).

   Optional RNA removal. Add **10 µl** of **RNase** (cat # 1006-10). Vortex the sample for 10 s and Incubate for **10 min** at **50 °C** with shaking at **800 RPM**.
7. Add **100 µl** of **L3P** precipitation solution and mix by inverting the tube three times.
8. Put on ice for **3 min**.
9. Centrifuge for **10 min** at **14 000 RPM**.
10. **Attention.** In the isolation protocol, use **400 µl** of supernatant as the sample.

    Follow point 1. of the protocol.

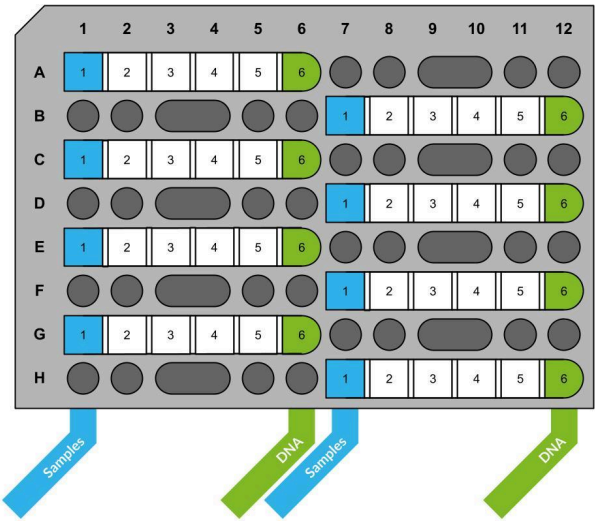
Protocol

Protocol files

device	protocol name	protocol file	installation
Auto-Pure Mini	MQ-PLT-MI	aabiot.com/protocols/magnifiq/MI/MQ-PLT-MI.txt	1. Create folder "items" on a USB drive and copy the protocol file to it. 2. Insert the USB drive into a USB slot in the device. 3. On a device screen, go to Settings > System > Transfer >Import. 4. Select the protocol and tap "Import".
Auto-Pure Mini (QR code)	MQ-PLT-MI		1. On a device screen, go to Run > ☰ > ⌗ 2. Scan the QR code with the device's scanner.
Auto-Pure S32	MQ_PLT_S32	aabiot.com/protocols/magnifiq/S32/MQ_PLT_S32.txt	1. Create folder "im_export_protocols" on a USB drive and copy the protocol file to it. 2. Insert the USB drive into a USB slot in the device. 3. On a device screen, go to Protocols >Import. 4. Select the protocol and tap "Import".

Extraction protocol

1. Place **XS-PT** stripes in the rack.



2. Remove the foil from the **XS-PT** stripes starting from well **6**.

Note. The wells are numbered on the side of the strip. Well **6** is distinguished by a rounded edge.

Carefully peel back the foil by removing it slowly at an approximately 45° angle so that all plastic comes off the top of the strip/cartridge. Ensure that all foil and any residual adhesive are completely removed before placing stripes/cartridges in the extraction device (see figure).

3. Add **400 µl** of sample to the well **1** (first from the left) on the **XS-PT** strip.

4. Place the rack in the extraction device.

5. Place the appropriate number of **tip combs 8** in the extraction device.

6. Run the protocol on your device.

7. After the program is over, remove the combs and then remove the rack from the extraction device and transfer the purified DNA located in well **6** (first from the right) on the **XS-PT** strip into sterile tubes (not included).

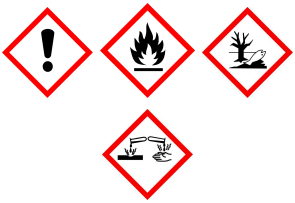
Note. Store extracted material at 4 °C.

Safety information

DANGER

Proteinase K

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
P261 Avoid breathing dust.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311 If experiencing respiratory symptoms call a Poison Center or doctor/physician.



DANGER

XS-PT - extraction strip

H225 Highly flammable liquid and vapor.
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312+P330 If swallowed: Call a poison center/doctor/ if you feel unwell.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

A&A BIOTECHNOLOGY
innovating life science

A&A Biotechnology, ul. Strzelca 40, 80-299 Gdańsk, Poland
phone +48 883 323 761, +48 600 776 268
info@aabiot.com, www.aabiot.com

version 2026-1