MagCore® Genomic DNA Plant Kit

For extraction of genomic DNA from plant and fungal tissues.
Applicable Models : HF16, Compact, HF48, Super, HF16 Plus, Plus II

Cartridge Code 301

Cat.No. MGP-01 // MGP-02

Kit Contents

Check that the following parts are included in addition to the main unit:

Cat.No. MGP-01 Contents:

Pre-filled Cartridge Reagent	*36 pcs.*
Pipet Tip plus Holder Set	*36 sets.*
Sample Tube	*36 pcs.*
Elution Tube	*36 pcs.*
Filter Column Set	*36 pcs.*
RNase A(10mg/ml, 275µl)	*1 pcs.*
GP1 Buffer(25ml)	*1 pcs.*
GP2 Buffer(6ml)	*1 pcs.*

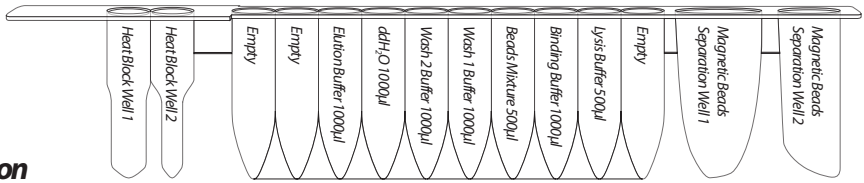
Cat.No. MGP-02 Contents:

Pre-filled Cartridge Reagent	*96 pcs.*
Pipet Tip plus Holder Set	*100 sets.*
Sample Tube	*100 pcs.*
Elution Tube	*100 pcs.*
Filter Column Set	*100 pcs.*
RNase A(10mg/ml, 550µl)	*1 pcs.*
GP1 Buffer(50ml)	*1 pcs.*
GP2 Buffer(15ml)	*1 pcs.*

Storage and Stability :

1. This kit should be stored at room temperature.
2. For long term storage, RNase A should be stored at 2-8℃.
3. Shelf Life: 18 Months.

Cartridge Contents :



Description

MagCore® Genomic DNA Plant Kit is designed for purification of DNA from plant tissues and cells by using MagCore® autoextraction instrument. The provided Filter Column Set can filtrate hard tissue sample and prevent tissue residues to obstruct pipette tip during the process of MagCore®. The kit contains all required reagents and labware for automated purification using magnetic-particle technology. Easy select program code number 301 in MagCore® and combine using this kit that it can perform high quality genomic DNA.

Applications

Using magnetic-particle technology to purify genomic DNA up to 100mg of fresh tissue. The purified genomic DNA can be directly used for downstream application such as quantitative PCR, PCR, southern blotting, RADP / AFLP, etc.

Preparation Before Using

The kit procedures are optimized for a maximum of 100 mg of wet-weight or 20 mg of dried starting material.

Exceeding the recommended maximum amount of starting material will result in inefficient lysis, resulting in low yield and purity.

Tissue Dissociation Protocol

1. Cut 50 mg (up to 100 mg) of fresh or frozen plant tissue or 5 mg (up to 20 mg) of dried sample.
2. Grind the sample with mortar and pestle under liquid nitrogen to a fine powder. For some plant samples, liquid nitrogen may be unnecessary for homogenization.
3. Transfer it into a microcentrifuge tube (not provided).

Lysis Step:

1. Add 400µl GP1 Buffer and 5µl RNase A (10mg/ml) into the microcentrifuge tube and mix by vortexing. Do not mix GP1 Buffer with RNase A before use.
2. Incubate at 65°C for 10 minutes. During incubation, invert the tube every 5 minutes.
3. Add 100µl GP2 Buffer and mix by vortexing.
4. Incubate on ice for 3 minutes. Place a Filter Column into a 2 ml Collection Tube and apply the entire lysate from previous step to the Filter Column.
5. Centrifuge for 3 minutes at full speed (13,000 rpm).
6. Discard the Filter Column and carefully transfer clarified lysate (about 400µl) in the collection Tube to the MagCore® Sample Tubes
7. Put the prepared Sample Tube into the correct well of T-Rack. (see page 3-10)
8. Put Elution Tube and Tip Plus Holder Set (HF16, Compact) / Pipette Tip (Super, Plus) into the correct wells of the T-Rack. (see page 3-10)
9. Run Code 301 program at MagCore®.

Fungal Tissue Protocol

Sample Preparation

1. Collect the fungal tissue up to 20 mg.
2. Grind the sample with mortar and pestle under liquid nitrogen to a fine powder.
3. Transfer it into a microcentrifuge tube (not provided). Do not allow the sample to thaw.

Cell Lysis

1. Add 400µl GP1 Buffer and 5µl RNase A (10mg/ml) into the microcentrifuge tube and mix by vortexing. Do not mix GP1 Buffer with RNase A before use.
2. Incubate at 65°C for 10 minutes. During incubation, invert the tube every 5 minutes.
3. Add 100µl GP2 Buffer and mix by vortexing.
4. Incubate on ice for 3 minutes. Place a Filter Column into a 2 ml Collection Tube and apply the entire lysate from previous step to the Filter Column.
5. Centrifuge for 3 minutes at full speed (13,000 rpm).
6. Discard the Filter Column and carefully transfer clarified lysate (about 400µl) in the collection Tube to the MagCore® Sample Tubes.
7. Put the prepared Sample Tube into the correct well of T-Rack. (see page 3-10)
8. Put Elution Tube and Tip Plus Holder Set (HF16, Compact) / Pipette Tip (Super, Plus) into the correct wells of the T-Rack. (see page 3-10)
9. Run Code 301 program at MagCore®