Column-Pure Plant DNA Extraction Kit

Cat. No.	Description	Quantity
D519	Column-Pure Plant DNA Extraction Kit	50 preps

Product Description

abm's Column-Pure Plant DNA Extraction Kit is a rapid and efficient method for the isolation and purification of total DNA from plant and plant-derived food samples. The silica spin column technology allows for recovery of high quality nucleic acids from fresh, preserved or frozen samples. The kit can be used in downstream applications such as PCR and sequencing based detection of GMO-DNA and food related pathogens.

Kit Components

Component	Quantity	Part No.
Plant Lysis Buffer	45 ml	P519-1
Binding Buffer	45 ml	P518-1
Wash Buffer 1	45 ml	P518-2
Wash Buffer 2 (concentrate)	20 ml	P518-3
Elution Buffer	10 ml	P151
Proteinase K	525 µl	P029-1
Spin Columns and Collection Tubes	50	P001

Additional Materials Required (not supplied)

Material
Mortar and pestle
Liquid nitrogen or dry ice
95-100% Ethanol

Storage

•Store all buffers at 18-25°C (room temperature).
•Upon arrival store Proteinase K at 4°C for up to 1 year or -20°C for long term usage.

Protocol

Important notes before starting:
•Add 80 ml of 95-100% Ethanol to Wash Buffer 2 bottle to prepare a 1X concentration working stock.
•Perform all centrifugation steps at 12,000 rpm at room temperature unless stated otherwise.

1. Weigh 100-200 mg of sample into a mortar containing liquid nitrogen. Grind sample into a powder using a pestle. Transfer powdered sample into a DNase-free 1.5 ml microcentrifuge tube. Alternatively, weigh 100-200 mg of sample into a 2.0 ml microcentrifuge tube. Flash freeze using a dry ice and ethanol bath. Use a pestle to grind the sample into a powder.

2. Add 700 µl of Plant Lysis Buffer and 10 µl of Proteinase K, mix by pipette. Heat sample at 55°C for 30 min.

3. Centrifuge at maximum speed for 5 min.

4. Carefully transfer 450 µl of clarified supernatant into a clean 1.5 ml microcentrifuge tube. Add 650 µl of Binding Buffer and vortex. Then add 350 µl of 95-100% ethanol and vortex.

5. Apply 700 µl of sample to a Spin Column and centrifuge for 1 min. Discard flow-through. Apply the remaining sample and repeat.

6. Add 700 µl of Wash Buffer 1, centrifuge for 1 min. Discard flow-through.

7. Add 500 µl of Wash Buffer 2, centrifuge for 1 min. Discard flow-through. Repeat.

8. Centrifuge Spin Column dry for 2 min.

9. Transfer Spin Column to a clean 1.5 ml microcentrifuge tube. Add 50 µl of Elution Buffer to the center of Spin Column. Centrifuge for 1 min. Store purified DNA at -20°C.

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