Microzone Product Datasheet

Product code: 2PKL1-100 Lot Number:

DNAmite— Plant DNA Extraction Kit

P. Code	Size in 100 Rxn	Component	Description	Lot Number	Expiry
LA	2 x 60 mL	Solution LA	Lysis Solution		
PA	2 x 15 mL	Solution PA	Precipitation Solution		
CA	2 x 30 mL	Solution CA	Clean Up Solution		

Applications

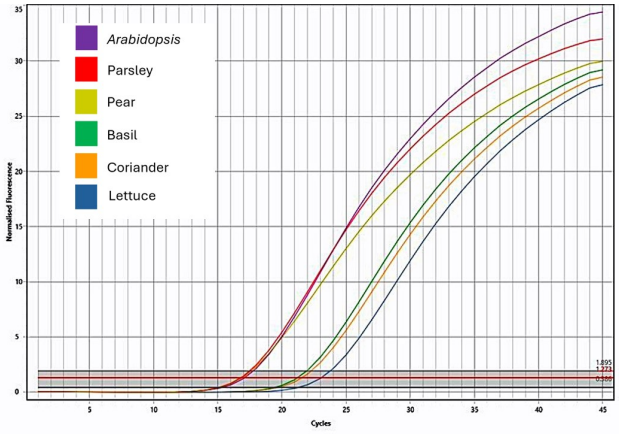
- Extraction of DNA from Plant sources
- End-Point PCR
- Real-Time PCR

Product Description

Part of the 'Free From' Microzone range, the DNAmite Plant DNA Extraction Kit requires less than an hour to efficiently extract DNA from a range of plant sources. The process does not involve the use of solvents or other harmful chemicals, nor spin columns or magnetic beads which are usually required in traditional DNA extraction methods. DNAmite Plant DNA Extraction Kit also uses less plasticware when compared with conventional DNA extraction methods, reducing the environmental impact of the process.

Key Features

- Obtain high quality and quantity of DNA from plant material.
- 'Free From' the use of columns, magnetic beads and solvents.
- Fast — From sample to purified DNA in less than an hour.



Real-time PCR amplification from DNA extracted using the DNAmite Plant DNA Extraction Kit. 50 mg of *Arabidopsis*, Parsley, Pear, Basil, Coriander and Lettuce leaves were processed with DNAmite Plant kit. Extracted DNA was used for the amplification of the 28S gene in real-time PCR using MegaMix Emerald (Microzone's dye-based qPCR mastermix).

Associated Products:

Just Water — Molecular Biology Grade in convenient 1 mL tubes.

MegaMix Ruby & Diamond — Inhibitor-Resistance PCR mastermix, with and without gel loading dye incorporated.

MegaMix Emerald — Dye-based qPCR mastermix.

Protocol

1. Weigh up to 50 mg of plant material, cut into small slices and place in a 1.5 mL microtube.
   Note: Input material may need adjustment depending on the species.
2. Add 200 µL of Solution LA and grind the sample with a microtube pestle.
   Tip: If solution LA shows a white precipitate, place bottle in a warm water bath or microwave briefly until solution becomes clear.
3. Add additional 800 µL of Solution LA and vortex sample until well-mixed.
4. Leave at room temperature for 5 minutes.
5. Add 100 µL of Solution PA and vortex sample until well-mixed.
   Note: Supernatant and plant material should turn milky in colour.
6. Centrifuge at 10,000 ×g for 5 minutes.
7. Transfer 500 µL of the supernatant into a new 1.5 mL microtube, being careful to avoid transferring any debris.
   Note: Sample should be completely clear and free of debris. If not, repeat step 6 onward.
8. Add 500 µL of Solution CA and vortex sample until well-mixed.
9. Leave at room temperature for 5 minutes.
10. Centrifuge at 13,000 ×g for 7 minutes to pellet the DNA.
    Note: Centrifugation will result in an invisible pellet.
11. Remove all the supernatant with a 1 mL pipette.
    Tip: Avoid touching the tube walls to not disturb the invisible pellet.
12. Re-centrifuge tubes briefly and remove any remaining liquid.
    Tip: Use a P20 pipette to guarantee complete removal of liquid.
13. Elute in 30-100 µL of Molecular Grade Water (such as Microzone's Just Water) or TE buffer.
14. Leave at room temperature for at least 10 minutes to allow the DNA to rehydrate.

For research use only

Product Handling

Storage

To ensure the quality of the product until the expiry date keep at the recommended storage temperature and limit exposure to light.

Contamination Control

To prevent erroneous results ensure work environment is free of contamination by cleaning your workstation and equipment with a DNA decontaminant daily, wear gloves, use sterile tubes and filter pipette tips.

Simple | Effective | Efficient

Version 2.03

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