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Product information

QF 24 V4
V1 Feb 2020

Rapid Plant DNA Genomic Isolation Kit

Catalog #: PT71816 / PT71817
Size: 100 preps / 500 preps
Storage: 4°C*

*: Product will be shipped at ambient temperature. Check storage conditions.

Product Description:

The kit is designed for rapid small-scale extraction of high quality genomic DNA from a variety of fresh or dry plant tissues. Purified DNA can be used for many downstream applications such as PCR, restriction digestion, hybridization and other applications.

Features:

- Rapid & simple.
- High quality of DNA. OD260/OD280 of purified DNA is generally 1.8~1.9.
- No toxic substance. The kit does not contain toxic reagents.
- Easy to scale up.

Composition:

Components	PT71816 (100 Preps)	PT71817 (500 Preps)
Buffer PCL	50 ml	250 ml
Buffer PP	24 ml	120 ml
TE Buffer	20 ml	100 ml
Protocol	1	1

Storage:

Transportation at ambient temperature. Store at 4°C. Valid for 1 year and a half.

Procedures:

1. Pre-warm 1 ml of Buffer PCL at 65°C.

> **NOTE:** Buffer PCL may form precipitates during long-term storage. Warm the bottle at 65°C and then transfer 1 ml aliquot.

2. Grind 100 mg fresh plant tissue (or 20 mg dry plant tissue) to fine powder in liquid nitrogen. Transfer the powder into a 1.5 ml tube, add 400 µl Buffer PCL, and incubate at 65°C for 10-20 minutes.

> **NOTE:** To obtain RNA-free DNA, add 20µl RNase A solution (20 mg/ml - not supplied in the kit) to the tube. Mix thoroughly and incubate at room temperature for 5 minutes before step 3.

3. Add 200 µl Buffer PP, mix by inverting. Incubate at -20°C for 5 minutes.

4. Centrifuge at 12,000 x g for 5 minutes at room temperature. Transfer the supernatant into a new 1.5 ml tube.

5. (Optional) Add 0.2 ml of chloroform to the supernatant, mix well by inverting 10 times. Centrifuge at 12,000 x g for 2 minutes. Carefully transfer the supernatant to a clean 1.5 ml tube.

6. Add equal volume of isopropanol (approx 0.3-0.5 ml) to the solution, mix well by inverting 5 times. Incubate at room temperature for 2~5 minutes. Centrifuge at 12,000 x g for 5 minutes, discard the supernatant carefully.

7. Add 1 ml of pre-cooled 75% ethanol to the tube, mix well by inverting 10 times. Centrifuge at 12,000 x g for 1 minute, discard the supernatant.

8. Repeat the Step 7 once.

9. Air-dry the pellet at room temperature with the lid open for 2~5 minutes.

10. Add 50-200 µl of TE buffer to dissolve DNA pellet. Keep at 4°C for a couple hours until DNA pellet is completely dissolved. Purified DNA is ready for use. For long term storage keeps at -20°C.

NOTE: Pre-warm TE Buffer to 65°C may increase efficiency of elution.