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800 GENOME, 800 GENETIC

# G2P Plant DNA Purification Kit (Solution Based: DNA extraction & Purification)

**Cat # ☐ PUR17-50 ☐ PUR17- 250 ☐ PUR17-50-S**
**Pack Size: . ☐ 50 reactions ☐ 250 reactions ☐ 5 reactions**
**Storage: Room Temperature***

## Introduction:

The G2P Plant DNA Purification Kit from Gene to Protein Pvt Ltd is an advanced solution based DNA isolation protocol that overcomes the challenges of extracting DNA from plant tissue, enabling the recovery of high-quality DNA from fresh growing leaf samples of any plant. The isolated DNA is perfect for use in high-performance downstream applications. Proper homogenization of the leaf sample is essential to obtain optimal yield. The kit can be used with a variety of plant samples, including wheat, maize, Arabidopsis, tomato, and tobacco, and typically yields between 3 to 15 µg of high-quality DNA, depending on the sample type. With its state-of-the-art features, the G2P Plant DNA Purification Kit is an excellent choice for researchers who need reliable and high-quality DNA for their experiments.

## Kit Content:

* Store at 4°C

| S.No | Components | PUR17-50 | PUR17-250 | PUR17-50-S |
|---|---|---|---|---|
| 1 | Buffer PDC | 30mL | 150mL | 3mL |
| 2 | Rnase A(10mg/mL)* | 500 µl | 2.5mL | 50 µl |
| 5 | Buffer E (Elution Buffer) | 5mL | 25mL | 500 µl |

## Reagents/material required but Not Provided

- Chloroform:Isoamyl alcohol (24:1)
- 100% Ethanol
- Plastic Pestle/Tissue Lyser: For Mechanical lysis of the plant tissue.

## Protocol

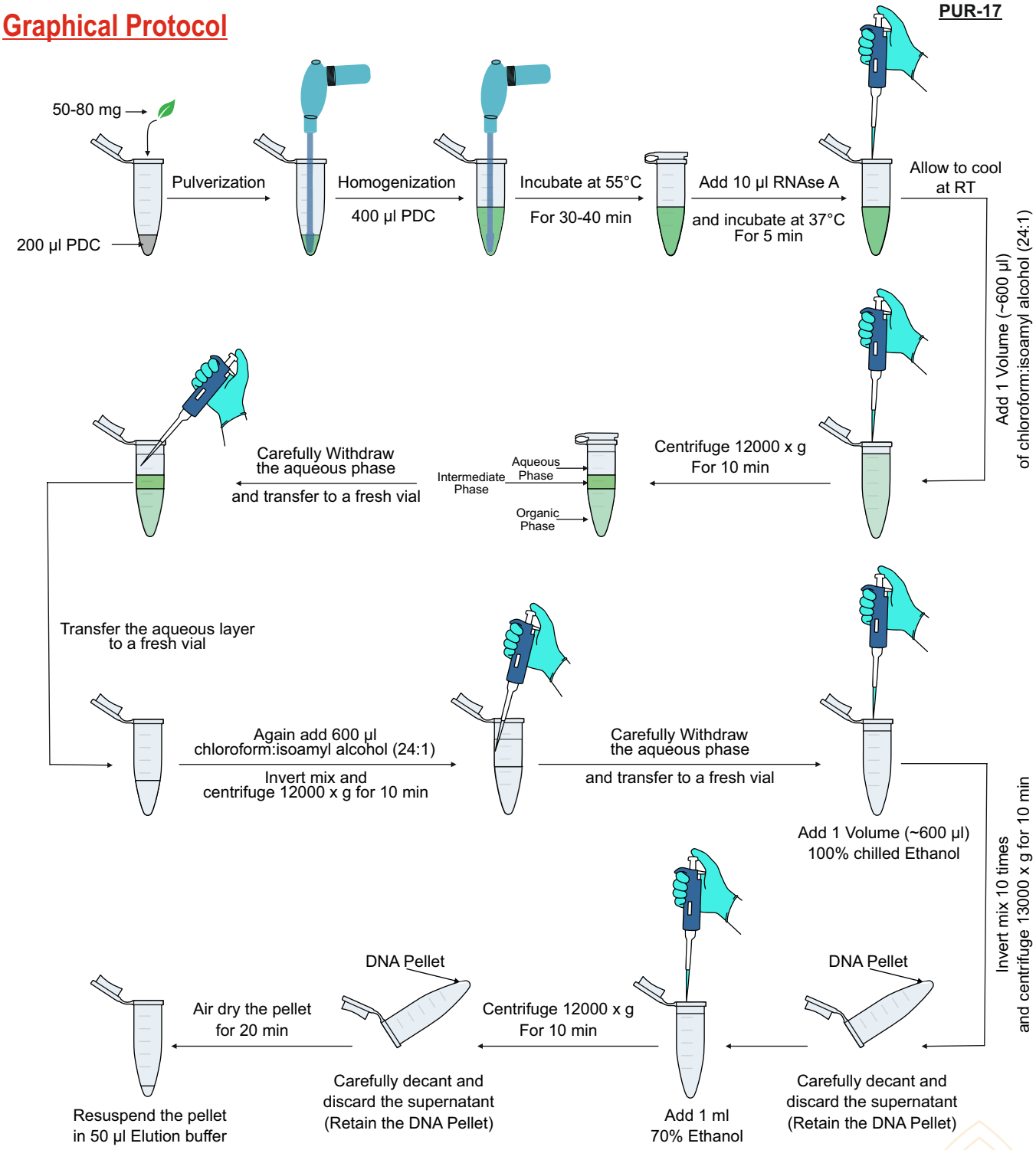
1. Take ~50-80mg fresh growing leaf/pulp/soft tissue into a 1.5ml microcentrifuge tube.
2. Add 200 µl of Buffer PDC and homogenize well using a plastic pestle.

   Please note that if the tissue is hard, homogenize again after 10 min of incubation.
3. Once homogenization is complete, add additional 400 µl of Buffer PDC and mix well
4. Incubate at 55°C for 30-40 min.
5. Add 10 µl of RNase A and incubate at 37°C for 5 min, then allow it to cool at room temperature for 5 min.
6. Add one volume (~600 µl) of Chloroform:Isoamyl alcohol (24:1) to the above mix and invert it.
7. Centrifuge at 12,000 x g for 10 min at 4°C.
8. Transfer the supernatant into a fresh 1.5ml microcentrifuge tube.
9. Repeat steps 7-8 once again.
10. Add 500 µl of 100% chilled ethanol and invert mix 10 times. Centrifuge at 12,000 x g for 10 min at 4°C.
11. Discard the supernatant and add 1 ml of 70% ethanol. Centrifuge at 12,000 x g for 10 min at 4°C.
12. Discard the supernatant and air dry the DNA pellet for up to 20 min. Then resuspend the pellet in 30-50µL of BufferE.

By following these steps, the G2P Plant DNA Purification Kit can produce yields ranging from 3 to 15 µg of high-quality DNA, depending on the plant samples utilized, such as wheat, maize, Arabidopsis, tomato, or tobacco. This isolated DNA is suitable for high-performance in delicate downstream applications.

## Graphical Protocol

**PUR-17**




## Result

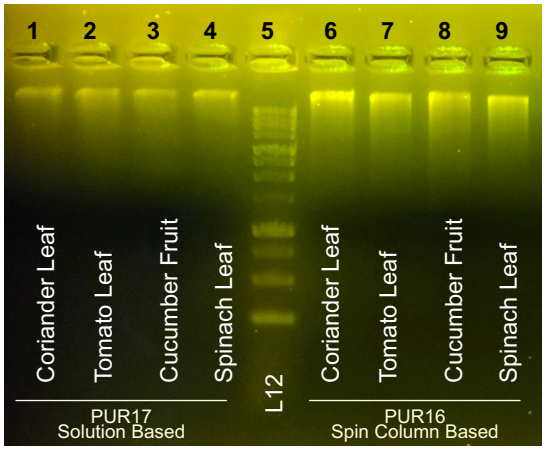



**Fig:** Various plant genomic DNA was isolated using PUR17 (lane 1-4) and PUR16 (lane 6-9). 100ng of DNA sample from each plant was loaded on 0.8% agarose gel.