PrimePrep™ Genomic DNA Extraction Kit (from Plant)

Introduction

PrimePrep™ Genomic DNA Extraction Kit (from Plant) is designed for isolating genomic DNA from plant tissue and food (for GMO detection) samples.
This kit does not require mechanical homogenization in processing, so total hands on work time is only less 30 minutes.

Storage Conditions and Product Stability

All solutions should be tightly sealed and stored at room temperature. These reagents should remain stable for at least 1 year in their unopened containers.
The Enzyme Solution should be stored at - 20℃.

Kit Components

Cat. No. / Reagents	K-4000 (50 prep.)	K-4001 (200 prep.)
Spin column	50 ea	50 ea x 4
Collection tube	100 ea	100 ea x 4
Buffer PTL	22 ml	22 ml x 4
Buffer PPT	7 ml	7 ml x 4
Buffer PGB	25 ml	25 ml x 4
Buffer GW1	20 ml	20 ml x 4
Buffer GW2	10 ml	10 ml x 4
Buffer GE	10 ml	10 ml x 4
Enzyme Solution	1.2 ml x 2	1.2 ml x 8

Before you begin

1. Add 15 ml ethanol to Buffer GW1 before use.
2. Add 40 ml ethanol to Buffer GW2 before use.
3. Check Buffer PTL, PGB and GW1 before use for salt precipitation.

Note: Re-dissolve any precipitants by warming at 50℃.
Do not shake Buffer PTL and PGB vigorously.

GeNetBio GLOBAL GENE NETWORK
Tel. 1599-4003, 0502-523-3484 **Fax.** 0502-523-3485
E-mail genetbio@genetbio.co.kr **homepage** www.genetbio.com

Experimental Protocol

1. Grind the sample material (<100 mg wet weight or <20 mg lyophilized tissue) using a mortar and pestle or homogenizer.

2. Add 400 ㎕ PTL Buffer and 40 ㎕ Enzyme Solution. Vortex and incubate for 30 min at 65℃. Invert tube 2~3 times during the incubation for lysis.

   Note: If the precipitants is formed in PTL Buffer, re-dissolve any precipitants by warming at 50℃.

3. Add 100 ㎕ PPT Buffer. Mix by inverting and incubator for 5 min for 4℃.

4. Centrifuge for 5 min at 13,000 rpm.

5. Transfer 300~400 ㎕ of the clear lysate (supernatant) to a new 1.5 ml tube.

6. Add 400 ㎕ PGB Buffer and 400 ㎕ absolute ethanol. Mix well by inverting.

7. Transfer 600 ㎕ of the mixture into a spin column, and centrifuge for 1 min at 13,000 rpm. Discard flow-through. Repeat this step with the remaining sample.

8. Transfer the spin column to a new 2 ml collection tube for filtration.

9. Add 500 ㎕ GW1 Buffer, and centrifuge for 1 min at 10,000 rpm.

10. After centrifugation, discard the flow through and reassemble the spin column to a new 2 ml collection tube.

11. Add 500 ㎕ of Buffer GW2 to the spin column, and centrifuge for 1 min at 10,000 rpm.

12. After centrifugation, discard the flow through and reassemble the spin column with its collection tube.

13. Centrifuge once more at 12,000 rpm for 1~2 min to completely remove ethanol, and check that there is no droplet clinging to the bottom of collection tube.

    Note: Residual GW2 Buffer in the spin column may cause problems in later application.

14. Transfer the spin column to a new 1.5 ml tube for elution.
    Add 100 ㎕l GE Buffer onto spin column, and wait for at least 1 min at room temperature.

15. Centrifuge at 10,000 rpm for 1 min.