(DP305) Plant Genomic DNA Kit

TIANGEN BIOTECH(BEIJING)CO., LTD

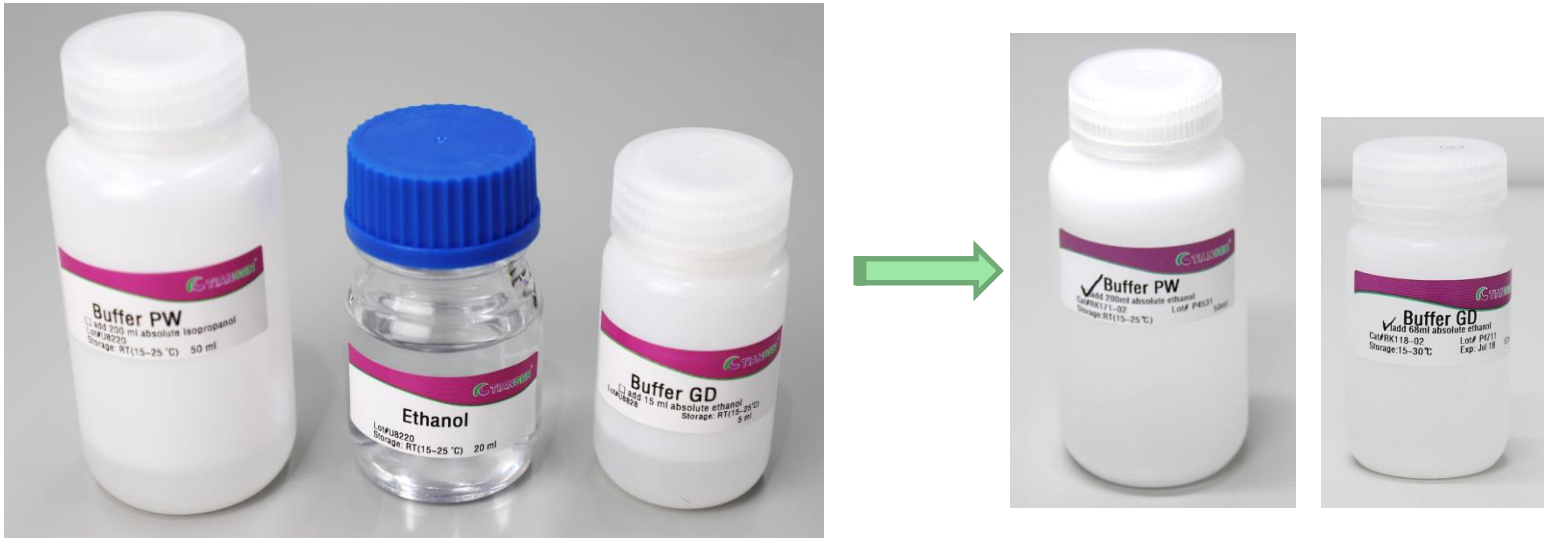
Ver. No. 20170328

Experiment Preparation

1. Plant leaves; Mortar; Liquid nitrogen
2. 96-100% ethanol; Mercaptoethanol
3. Pipette and matched sterile tips (10 μl, 200 μl, 1 ml); 1.5 ml centrifuge tubes
4. Vortex oscillator; Dry bath/water bath; Centrifuge

Experiment Preparation-Kit Preparation 1

Please add 96-100% ethanol in Buffer PW and GD before use according to the volume indicated on the label of the bottle.



Experiment Preparation-Kit Preparation 1

In preparation for the experiment, preheat Buffer GP1 in 65 ℃. Add mercaptoethanol in preheating Buffer GP1 to make its final concentration to 0.1% before the experiment.

Step 1

Add liquid nitrogen to 100 mg fresh plant tissue or 30 mg dry weight tissue, and fully grind the tissues.

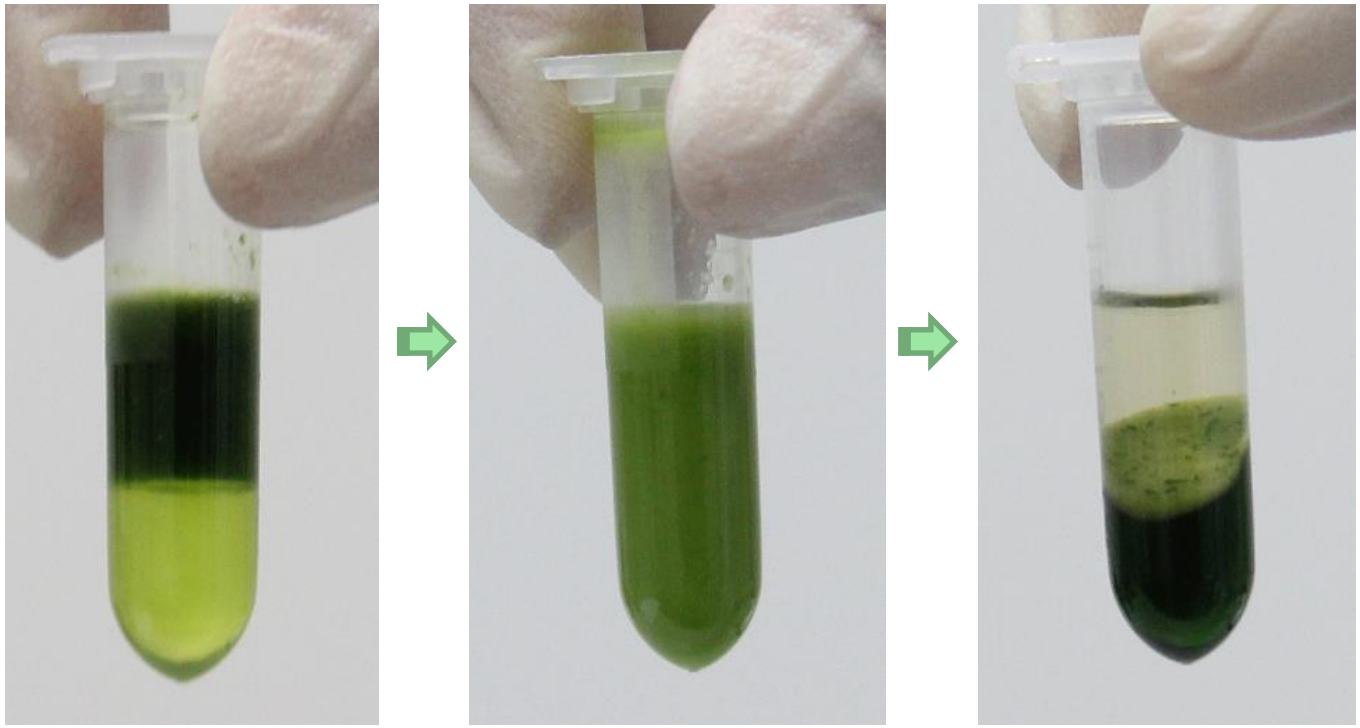
Step 2

Quickly transfer the ground powder to the centrifugal tube containing 700 µl preheating in 65 ℃ Buffer GP1.

Note: It is recommended to transfer with a metal spoon, which must be pre-cooled with liquid nitrogen before contacting the sample. Add mercaptoethanol in preheating Buffer GP1 to make its final concentration to 0.1% before the experiment.

Rapidly mix upside down, and then put the centrifuge tube in 65 ℃ dry bath/water bath for 20 min. In this process, mix the sample by turning the centrifuge tube upside down for several times.

Step 3



Add 700 µl chloroform

Mix well

Centrifuge at 12,000 rpm (~13,400×g) for 5 min

Step 4

Carefully transfer the upper water phase from the previous step into a new centrifuge tube.

Add 700 µl Buffer GP2 and mix well.

Step 5

Transfer the mixed liquid into Spin Column CB3.

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, and discard the waste liquid (The volume of the spin column is about 700 µl, so add liquid to centrifuge in different times).

Step 6

Add 500 μl Buffer GD to Spin Column CB3

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, discard the waste liquid in the collection tube and place the Spin Column CB3 into the collection tube.

Step 7

Add 600 μl Buffer PW to Spin Column CB3 (ensure 96-100% ethanol has been added before use).

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, discard waste liquid in the collection tube and place the Spin Column CB3 into the collection tube.

Step 8 Repeat step 7.

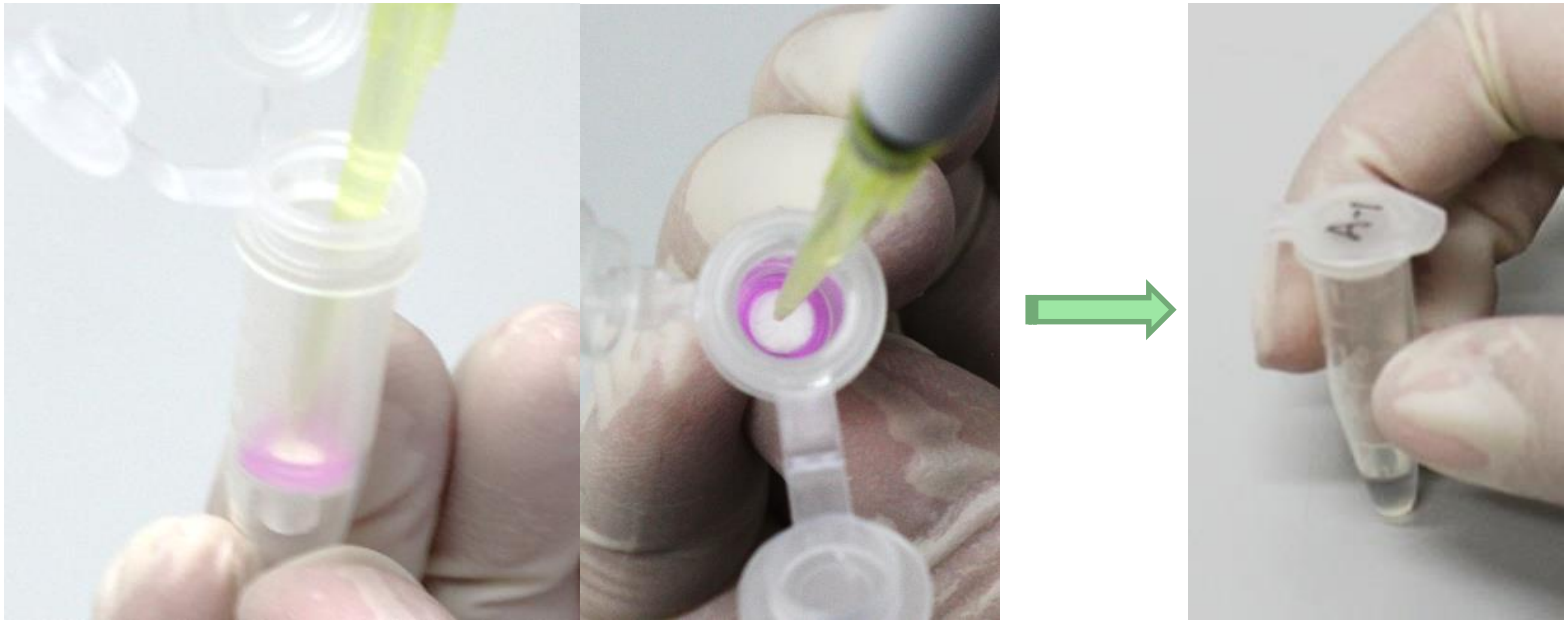
Step 9

Centrifuge at 12,000 rpm (~13,400×g) for 2 min, and discard the waste liquid.

Place the Spin Column CB3 at room temperature for 2 minutes to completely dry Buffer PW in the membrane.

Note: Ethanol residues in Buffer PW can inhibit subsequent enzymatic reactions (restriction enzyme digestion, PCR, etc.) experiments.

Step 10



Transfer the Spin Column CB3 into a 1.5 ml centrifuge tube, and add 50-200 μl Buffer TE to the middle of the adsorption membrane. Place at room temperature for 2 min and centrifuge at 12,000 rpm (~13,400×g) for 2 min to collect the solution into the centrifuge tube.