Plant genome DNA extraction kit

Cat: D1500
Package: 50T/100T
Storage: RT, Valid for 1 year (RNase A is shipped as an attachment and stored at -20°C).

Product composition:

Kit composition	50T	100T	Storage
RNase A	100μL	100μL×2	-20°C
Reagent A: lysate	52mL	104mL	RT
Reagent B: extract	6mL	12mL	RT
Reagent C: binding solution	5mL	10mL	RT
Bleaching solution	16mL	16mL×2	RT
Eluent	6mL	12mL	RT
DNA adsorption column	50	100	
Specification	1	1	

Notes:

Please add anhydrous ethanol to the bleach solution before use. Please refer to the label on the bottle to add the volume. It is necessary to bring anhydrous ethanol (48mL anhydrous ethanol per bottle of bleach solution).

Product description:

This kit does not contain β-mercapto ethanol and other irritating reagents, and the extraction process does not need to use toxic phenol chloroform and other organic matter extraction. The silicon matrix material used in the centrifugal adsorption column is our company's unique new material, which can efficiently and specifically adsorb DNA, and can maximize the removal of foreign proteins and other organic compounds in the cell. The extracted genomic DNA fragments were large, high purity, stable and reliable. Plant genomic DNA extracted using this kit can be used in a variety of routine operations, including enzyme digestion, PCR, library construction, Southern hybridization and other experiments.

Operation steps:

1. Plant tissue pretreatment: Take fresh plant tissue (not more than 100mg) or dry weight tissue (not more than 20mg), fully grind in liquid nitrogen to fine powder, let liquid nitrogen volatilize naturally.
2. Quickly transfer the ground plant tissue powder to A pre-cooled 2mL centrifuge tube, then add 1mL reagent A, swirl and mix, warm bath at 65°C for 10min, gently shake five times during the period, so that the tissue powder deposited below is re-dispersed into the solution.
3. After the warm bath, add 100μL reagent B into the centrifuge tube, thoroughly mix it upside down, and then ice bath for 10min.
4. After the ice bath, centrifuge at 12000rpm at 4°C for 10min.
5. Avoid the upper solid protein layer and transfer the lower solution into A new 2mL centrifuge tube with 1mL gun tip, then add 0.7 times the volume of anhydrous ethanol to fully reverse mix,

100μL of reagent C, and then add 2μL RNase A to reverse mix, and finally transfer the mixture to the DNA adsorption column (the adsorption column is placed in the collection tube). Centrifuge at 12000rpm for 1min at 4℃.

[Note]

The upper solid protein layer is soft, and can be gently opened with the gun head against the tube wall, and then slowly extend the gun head into the tube for easy absorption; It is normal that flocculent may appear after mixing with ethanol. DNA adsorption column can add up to 800μL liquid at a time; If the mixture is more than 800μL, it is added to the adsorption column in two separate times.

6. Dump the waste liquid in the collection tube, put the DNA adsorption column back into the collection tube, add 600μL bleach solution (please check whether anhydrous ethanol has been added first), and centrifuge at 12000rpm at 4℃ for 1min.
7. Repeat Step 6.
8. Dump the waste liquid in the collection tube, put the DNA adsorption column back into the collection tube, centrifuge at 12000rpm at 4℃ for 2min, and place the cover for 2min.
9. The DNA adsorption column was put into a new centrifuge tube, with 50-100μL eluent added (the preheating effect would be better at 65℃ in advance), placed at room temperature for a few minutes, centrifuged at 4℃ at 12000rpm for 1min, and sampled for electrophoretic detection or stored at -20℃.

Notes:

1. Tissue samples should be selected as fresh and young as possible. Tissues rich in polysaccharides and polyphenols may fail to be extracted, so please use D1505 kit.
2. In the steps that need to absorb the supernatant, it should be avoided to suck the precipitation, otherwise it will block the adsorption column and affect the purity of the product.
3. If the reagent in the kit is precipitated, it can be melted in a 65℃ water bath without affecting the use.
4. The volume of the elution buffer should not be less than 50μL, and the DNA products should be stored at -20℃.

Related products:

D1010 6×DNA Loading Buffer
T1060 50×TAE Buffer
T1050 5×TBE Buffer
M1060 D2000 DNA Ladder
M1400 1kb DNA Ladder
G8142 GoldView Type II nucleic Acid Stain (5000×)
D1600 Bacterial genome DNA extraction kit
D1700 Animal tissue/cell genome DNA extraction kit
D1800 Whole blood genome DNA extraction kit