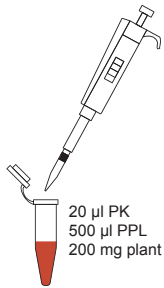


Before Starting

1. Add 10 ml of absolute ethanol to the PW1 (only at the first use).
2. Add 48 ml of absolute ethanol to the PW2 (only at the first use).
3. Add Proteinase K (PK) solution to the lyophilized powder of proteinase K and store at -20 °C until usage (only at the first use).
4. Check PW1 and PTB for salt precipitation. Redissolve any precipitation at 57 °C.
5. Preheat the solution of PE to 56 °C before starting the extraction process to enhance DNA extraction yield.

Protocol

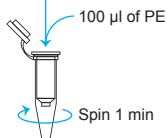
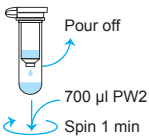
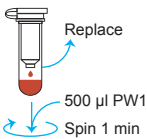
- 1 Cut off 100-150 mg of fresh or frozen plant tissue or 50-100 mg of dry sample. Freeze the sample with liquid nitrogen. Grind the sample to a fine powder then transfer it to a 1.5 ml microtube by adding 500 µl PPL. Add 20 µl of proteinase K, Mix them well by vortexing (15 s) and incubate at 60 °C for 30-60 min.
- 2 Add 500 µl of PTB to the microtube, and incubate at 60 °C for 30 min.
- 3 Add 0.5 ml chloroform to the microtube and shake for 15 s.
- 4 Spin for 5 min at 13,000 rpm to remove debris and transfer upper phase to the new tube.
- 5 Add 500 µl of PTB and mix it by vortexing for 10 s.
- 6 Transfer lysate to the spin column. Do not touch upper rim of column. Spin for 1 min at 13,000 rpm.
- 7 Replace the collection tube with a new one.
- 8 Add 500 µl of PW1 and spin for 1 min at 13,000 rpm.
- 9 Pour off the flow-through of collection tube.
- 10 Add 700 µl of PW2 and spin for 1 min at 13,000 rpm.
- 11 Pour off the flow-through of collection tube.
- 12 Repeat step 8 and 9 with 500 µl of PW2 (optional)
- 13 Spin for 1 min at 13,000 rpm to remove the remaining of the wash buffer. Transfer the spin column to a new 1.5 ml microtube.
- 14 Add 100 µl of preheated PE, wait 3 min at room temperature or 57 °C (For more yield). If you want more concentration add less PE (50 µl).
- 15 Spin for 1 min at 13,000 rpm to elute DNA from the column. Store DNA solution at -20 °C.



Vortex 15 s
60 °C 30-60 min

500 µl chloroform → 500 µl PTB

Spin for 5 min
~500 µl PTB
Vortex for 10 s



Plant DNA Extraction Kit

Before Starting

1. Add 10 ml of absolute ethanol to the PW1 (only at the first use).
2. Add 48 ml of absolute ethanol to the PW2 (only at the first use).
3. Add Proteinase K (PK) solution to the lyophilized powder of proteinase K and store at -20 °C until usage.
4. Check PW1 and PTB for salt precipitation. Redissolve any precipitation at 50 °C.
5. Preheat the solution of PE to 56 °C before starting the extraction process to enhance DNA extraction yield.

kit content			
No.	Description:	Packing	Qty.
1	PPL (Plant Lysis Buffer)	27 ml	1
2	PTB (Plant Tissue Binding Buffer)	27 ml	2
3	PW1 (Wash Buffer)	15 ml	1
4	PW2 (Wash Buffer)	12 ml	1
5	PE (Elution Buffer)	5 ml	1
6	PK (PK Storage Buffer)	1 ml	1
7	Proteinase k	20 mg	1
8	Spin Column	50	1
9	Collection Tube	50	2