

# Data sheet

## HigherPurity™ Plant DNA Purification Kit

Cat. No: AN0110-S (20 reactions)

Cat. No: AN0110 (50 reactions)

Cat. No: AN0112 (100 reactions)

### Description

**Plant DNA Purification Kit** offers a rapid and convenient method for purification of total DNA from a variety of plant tissue. The kit is based in DNA ability to bind silica in the presence of high concentrations of chaotropic salts. Eluted purified DNA is suitable and ready-to-use for PCR, real-time PCR, Southern Blotting and RFLP.

### Features

- **High yields:** up to 5-40µg total DNA from young leaves.
- **Ready to use** DNA.
- **Just a few minutes** procedure (about 60 min).
- **Mini format**

### Quality Certifications

Total DNA is isolated from a 100 mg young leaf sample, quantified with a spectrophotometer and analysed by electrophoresis.

### Storage

**Plant DNA Purification Kit** should be stored at room temperature (15–25°C) for up to 12 months without any reduction in performance. Store RNase A at -20°C.

### Kit Components

Item	preps		
	20	50	100
DNAprep spin columns	20	50	100
Filter column	20	50	100
Elution tubes (1.5 mL)	40	100	200
Collection tubes (2 mL)	40	100	200
BL1A Buffer	10 ml	25 ml	50 ml
BL2 Buffer	2X1.5 ml	8 ml	15 ml
BL3 Buffer*	6 ml	15ml	30 ml
Wash Buffer 1*	5 ml	13 ml	26 ml
Wash Buffer 2*	6 ml	15 ml	30 ml
Elution Buffer	6 ml	15 ml	30 ml
RNase A (lyophilized)**	10 mg	22 mg	43 mg

\*Add the volume ethanol (96%-100%) specified [Not included] to BL3 Buffer, Wash Buffer 1 and Wash Buffer 2 prior to initial use (see bottle label for volume). After ethanol has been added, mark the bottle to indicate that this step has been completed.

\*\*Store RNase A at -20 °C upon receipt of kit. Add sterile ddH<sub>2</sub>O to RNase A tube to make a 50 mg/ml stock solution. Vortex and make sure that RNase A has been completely dissolved. Store the stock solution at -20 °C.

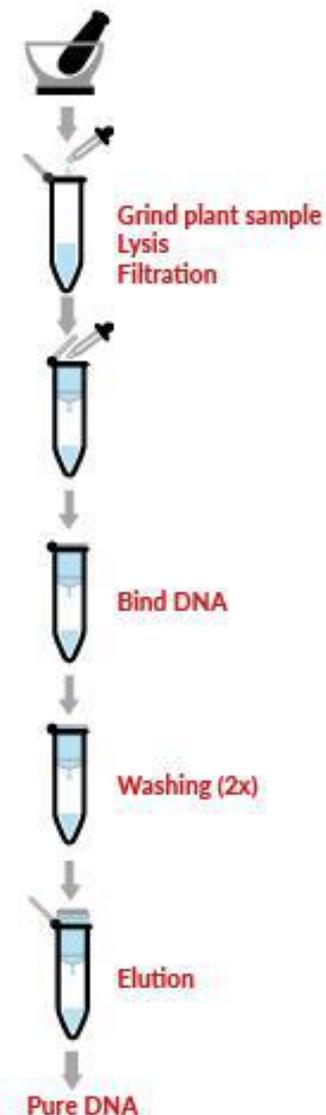
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## DETAILED PROTOCOL

1. Cut the plant samples and weight them (up to 100mg). Immediately after doing so, place them inside a mortar with liquid nitrogen.
2. Grind the sample under liquid nitrogen to a fine powder.
3. Transfer the sample powder to a 1.5 microcentrifuge tube (not provided).
4. Add 400  $\mu$ L of BL1A Buffer and add 8  $\mu$ l of RNase A (50 mg/ml) and mix by vortex vigorously.
5. Incubate at 65°C for 10 minute. Invert occasionally.
6. Add 130 $\mu$ l of BL2 Buffer, mix by vortexing and incubate on ice for 5 minutes.
7. Place a Filter Column in a 2 ml Collection tube and transfer the sample mixture to the column.
8. Centrifuge at full speed for 3 minute.
9. Carefully transfer the clarified filtrate to a new 1.5 ml microcentrifuge tube (not provided).

10. Add 1.5 volumes of BL3 Buffer to the clarified lysate and mix vigorously by vortexing.
11. Place the DNAprep Mini Spin Column in a 2ml collection tube and transfer 750 $\mu$ l of the sample mixture (including any precipitates if present) to the column.
12. Centrifuge at full speed for 1 minute. Discard the flow-through. Add the remaining sample mixture from step 10 and centrifuge again for 1 minute. Discard the flow-through from the collection tube and place the column back in the same collection tube.
13. Wash the DNAprep spin column by adding 400  $\mu$ L of Wash Buffer 1 and centrifuging at full speed for 30 s. Discard the flow-through.
14. Place the DNAprep column in a collection tube and add 650  $\mu$ l of WB2 and centrifuge at full speed for 30 s. Discard the flow-through.
15. Repeat step 14 for one more washing.
16. Again, Centrifuge at full speed for 3 minute. This step helps to dry the DNAprep spin column.

17. Place the DNAprep column into a new, labelled 1.5 microcentrifuge tube and pipet 50-100 $\mu$ l of Elution Buffer (preheated at 65°C) directly into the centre of the spin column. Close the cap and incubate for 3 minute at room temperature.
18. Centrifuge at full speed for 1 minute to elute DNA.
19. Store DNA at -20°C



## PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to [www.canvaxbiotech.com](http://www.canvaxbiotech.com) for Material Safety Data Sheet of the product.