

# DATA SHEET

Version: 04  
Revision date: 01/04/2024

## 1. Identification

Product name	<b>HigherPurity™ Plant DNA Purification Kit</b>
Cat. No	<b>AN0110 (50 reactions)</b>
Cat. No	<b>AN0112 (100 reactions)</b>
Cat. No	<b>AN0112-XL (250 reactions)</b>

## 2. 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.

## 3. Kit Components

Item	Quantity		
	AN0110 (50 rxn)	AN0112 (100 rxn)	AN0112_XL (250 rxn)
DNAprep spin columns	50	100	250
Filter column	50	100	250
Collection tubes (2 mL)	100	200	500
BL1A Buffer	25 ml	50 ml	125 ml
BL2 Buffer	7.5 ml	15 ml	37 ml
BL3 Buffer*	15 ml	30 ml	75 ml
Wash Buffer 1*	13 ml	26 ml	65 ml
Wash Buffer 2*	15 ml	30 ml	75 ml
Elution Buffer	10 ml	20 ml	50 ml
RNase A Solution**	480 µL	960 µL	2 x 1,2 mL

\*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 solution at -20 °C. upon receipt of kit.

## 4. 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**

## 5. Storage specifications

**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.

## 6. Quality Certifications

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

## 7. Further information



<b>Product Use Limitations</b>	This product is developed, designed, and sold exclusively only for research purposes use. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.
<b>Safety Information</b>	When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDS). These are available online in convenient and compact PDF format at <a href="http://www.canvaxbio.com">www.canvaxbio.com</a> where you can find, view, and print the MSDS for each CANVAX kit.

## 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 Solution 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 (not provided) 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

