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DATA SHEET

Version: 03
Revision date: 15/03/2023

1. Identification

Product name **HigherPurity™ Tissue DNA Purification Kit**

Cat. No. **AN0210 (50 reactions)**
Cat. No. **AN0211 (100 reactions)**
Cat. No. **AN0211-XL (250 reactions)**

2. Description

HigherPurity™ Tissue Genomic DNA Purification Kit offers a rapid and convenient method for purification of total DNA from a variety of 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 Contents

Item	Quantity		
	AN0210 (50 rxn)	AN0211 (100 rxn)	AN0211-XL (250 rxn)
Buffer BLY1	11 ml	22 ml	55 ml
Buffer BLY2	11 ml	22 ml	55 ml
Wash Buffer 1 *(WB1)	18.5 ml	37 ml	100 ml
Wash Buffer 2 * (WB2)	8 ml	16 ml	40 ml
Elution Buffer (EB)	10 ml	20 ml	50 ml
Proteinase K **	11 mg	2 x 11 mg	5x11 mg
DNA mini-spin column	50	100	250
Collection tube (2mL)	100	200	500
1.5 ml microtube	50	100	250
Micropestle	50	100	250

*Add the volume ethanol (96%-100%) specified [Not included] to WB1 and WB2 Buffer 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.

**Dissolve Proteinase K in water to obtain a 10 mg/mL stock solution. The Proteinase K solution can be stored for several days at 2–8 °C. For longer-term storage, the unused portion of the solution may be stored in aliquots at −20 °C until needed.

4. Storage specifications

The kit is shipped at ambient temperature. Upon arrival, store Proteinase K **at 4°C**. All other kit components can be stored at room temperature. The kit components are stable for 2 years, if stored properly.

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5. Features

- **High yields**: up tp 50µg; depends on type of sample.
- **Ready to use** DNA.
- **Just a few minutes procedure (about 60 min).**
- **Mini format**

6. Applications

All molecular biology applications, such as: RT-PCR, Southern blotting, RFLP, etc.

7. Recommended Protocol

Things to do before starting:

- Prepare dry baths or water baths before the operation: one to 60 ˚C for step 3 and the other to 70 ˚C for step 5.
- Preheat the Elution Buffer to 70 ˚C for step 12.

Protocol:

1. Cut 25 mg of animal tissue and transfer to a 2ml microcentrifuge tube (not provided). ***Use the micropestle to grind the material to pulp. You can grind the tissue samplein liquid nitrogen.***
2. Add **200µl** of **Buffer BLY1** and continue to homogenize the sample by grinding.
3. Add **20µl** of **Proteinase K (10mg/ml)**, mix by shaking vigorously, and incubate at 60°C for 60-120 minutes (Until the tissue is lysed completely). During incubation, invert the tube regularly.
4. **[Optional step; If RNA-free DNA is required]** Allow the mixture to cool to room temperature and add 4µl of RNase A (100mg/ml) [not provided], mix by shaking vigorously and incubate for 3 minutes at room temperature.
5. Add **200µl** of **Buffer BLY2**, mix by shaking vigorously, and incubate at 70°C for at least 10 minutes. During incubation, invert the tube regularly.
   (*Note that sample lysate should become clear. If there is still insoluble material present following the lysis step, centrifuge for 2 minutes at 14000g-16000g and transfer the supernatant to a new 1.5- ml microcentrifuge tube*).

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6. Add **200µl of absolute ethanol [not provided]** to the lysate and mix immediately by shaking vigorously for 10 seconds. In case precipitate appears, break it up by pipetting.
7. Place the **DNA mini-spin column** in a 2 ml **collection tube** and transfer the sample mixture (including any precipitate if present) to the column.
8. Centrifuge at 14,000g-16,000g for 2 minutes. Discard the collection tube containing the flow-through and place the **DNA mini spin column** in a new **collection tube**.
9. Add **400µl of Buffer WB1** and centrifuge at 14,000g-16,000g for 30 seconds. Discard the flow-through and place the **DNA mini spin column** back in the **collection tube**.
10. Add **750µl of Buffer WB2** and centrifuge at 14,000g-16,000g for 1 minute.
11. Discard the flow-through and place the **DNA mini spin column** back in the **collection tube** and centrifuge for another 3 minutes at 14,000g-16,000g to dry the matrix ofthe column.
12. Transfer the **DNA spin column** to a new **1.5 ml microcentrifuge tube** and pipet **100µl** preheated **Elution Buffer** directly to the centre of the spin column without touching the membrane. Incubate at room temperature 5 minutes.

    Notes: *Instead of Elution Buffer, DNA can also be eluted with TE or water; pH should be 8.0-8.5. Standard elution volume is 100µl. To increase concentration, elute with 30-50µl. To increase yield, elute with 200µl.*
13. Centrifuge for 1 minute at 14,000g-16,000g to elute purified genomic DNA. Discardthe **DNA spin column** and use DNA immediately or store at -20°C.

8. Further information

Product Use Limitations

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.

Safety Information

When working with chemicals, always wear a suitable lab coat, disposablegloves, 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 www.canvaxbio.com where you can find, view, and print the MSDS for each CANVAX kit.