Pioneer Research Anahita Company
No.157
Danesh street
Technology Park Pardis
Tehran/ Iran

DATA SHEET

Versions: 01
Revision date: 29/11/2023

1. Identification

Product name: DNA extraction kit from tissues and blood

Reactions: 100 rxns

Cat. No.: PRA-DNAbt

2. Description

To extraction of DNA from blood, use directly the sample. In the cases of tissue, you need to homogenize the tissue and, hence, in the cases of tissue you do not need solution A and Homogenizer buffer.

3. Kit Contents

Component	Cat. no	Quantity
Lysis solution A	PRA-KLS	20 ml
Lysis solution B	PRA-KLSB	25 ml
Lysis solution C	PRA-KLSC	5 ml
Homogenizer Buffer	PRA-HBt	25 ml
Precipitation solution	PRA-PS	25 ml
Washing buffer PI	PRA-WBpI	25 ml
Washing buffer PII	PRA-WBpII	25 ml
TE buffer	PRA-TE	5 ml
High absorbance column tube	PRA-Column	50 pcs
Collection Tube	PRA-CT	100 pcs

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4. Storage specifications

The components of the plasmid extraction kit can be conveniently stored at -20°C for later use.

5. Applications

Molecular Biology Applications:

- PCR

- PCR-Seq

- Southern Blot

6. Assay Procedure

DNA Extraction Protocol:

1. Add 500 microliters of Lysis Buffer B to a DNase/RNase free microtube.

2. Add an appropriate amount of the sample (e.g., 200 microliters of blood, 200 microliters of 0.5 McFarland Gram-negative bacteria suspension, or the entire lysate solution obtained from the tissue or lysed bacteria) to the microtube. Shake vigorously for 15 seconds, mix on a vortex, and incubate at room temperature for 10 minutes. Vortex the samples every 5 minutes.

3. Add 100 µl of Lysis Buffer C to the microtube and mix vigorously for 5 seconds.

4. Add 500 microliters of cold precipitating buffer to the microtube and mix gently by hand. Be careful not to mix Lysis Buffer C and precipitating buffer together; you can mix them and then add to the microtube.

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5. Add 750 µl of the contents of the microtube to the DNA extraction columns and centrifuge at 12,000 RPM for 1 minute. Ensure not to add extra sample volume to the column, as the kit method extracts ample DNA.

6. Transfer the column to a new collection tube and add 500 µl of wash buffer. Centrifuge at 8,000 RPM for 1 minute.

7. Repeat the washing process with the washing buffer one more time.

8. Centrifuge the column again at 12,000 RPM for 1 minute to drain the remaining buffer from the filters.

9. Transfer the column to a sterile DNase-free 1.5 ml microtube and add 100 µl of TE buffer. Incubate for 2 minutes at room temperature. Ensure that the temperature of the distilled water is around 55oC for better DNA purification.

10. Centrifuge the columns at 12,000 RPM for 1 minute. The resulting solution contains DNA. To increase the amount of extracted DNA, transfer the extracted DNA sample to the column and centrifuge again at 12,000 RPM for 1 minute.

7. Safety

The solutions used in the kit have oxidizing and acidic properties. Avoid direct contact with skin and eyes. In case of contact with the mentioned tissues, wash with plenty of water and seek medical attention at the nearest medical center.

8. Quality Certifications

The Mentioned product has been approved for marketing in Islamic Republic of Iran

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9. Further information

This product is developed, designed, and sold exclusively 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.

10. Other Kits

DNA Extraction Kits:

1. DNA extraction kits from blood and tissue by column
2. DNA extraction kits from gram-positive and negative bacteria
3. DNA extraction kit from mycobacterium
4. DNA extraction kit from Fungi
5. DNA extraction kit from virus
6. DNA extraction kit from HPV virus
7. DNA extraction kits from plant tissue

RNA Extraction Kits:

1. RNA extraction kits from blood and tissue
2. RNA extraction kits from gram-positive and negative bacteria
3. RNA extraction kit from mycobacterium
4. RNA extraction kit from Fungi
5. RNA extraction kit from the virus
6. RNA extraction kits from plant tissue

NOTE

All products have been produced by Karmania Pars Gene company in Iran.