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 HPV

Reactions: 50 rxns

Cat. No.: PRA-DHPV

## 2. Description

To purify DNA from HPV, homogenization is not required. However, it is crucial to break the fixed cells thoroughly. Solution A, used in this kit, effectively achieves this.

## 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 |
| Carrier | PRA-cr | 1 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 DNA extraction kit from HPV can be conveniently stored at room temperature.

## 5. Applications

Molecular Biology Applications:

- PCR

- PCR-Seq.

- Southern Blot

## 6. Assay Procedure

DNA Extraction Protocol:

1. Centrifuge 2 cc of LBC fluid in a sterile microtube for 5 minutes at 5,000 RPM. Pour out the supernatant completely and add 500 microliters of solution A. Continue the extraction process after 5 minutes of incubation. Ensure that incubation does not exceed 5 minutes at this stage.

2. Add 500 microliters of lysis buffer B to a DNase/RNase free microtube. Mix vigorously for 15 seconds on a vortex and incubate at room temperature for 10 minutes. Vortex the samples every 5 minutes. (Note: If the kit is used for blood or tissue, add the specified amounts mentioned in the previous section at this step.)

3. Add 100 µL of Lysis Buffer C and 10 µL of carrier to the microtube. Mix vigorously for 5 seconds.

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4. Add 500 microliters of cold precipitating buffer to the microtube. Mix gently by hand. Be careful not to mix Lysis Buffer C and precipitating buffer together before adding to the microtube.

5. Add 750 µL of the microtube contents to the DNA extraction columns and centrifuge at 12,000 RPM for 1 minute. Ensure that according to the kit method, sufficient amounts of DNA are purified, and avoid adding extra sample volume to the column.

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 microtube. Add 100 microliters of TE buffer and incubate for 2 minutes at room temperature. Ensure that the temperature of the distilled water is around 55°C 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. Please follow these safety guidelines:

- Avoid direct contact with skin and eyes.

- In case of contact with the mentioned tissues, wash with plenty of water.

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- Seek medical attention by going to the nearest medical center if needed.

## 8. Quality Certifications

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

## 9. Further information

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.

## 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. The 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.