

## Serum Plasma Free DNA Extraction Kit(Small amount)

**Cat:** D1810

**Size:** 50T/100T

**Storage:** Store at room temperature(10-30°C), valid for 1 year, digestive fluid, DNA Carrier please store at -20°C, avoid repeated freezing and thawing. (This kit can be shipped at room temperature.)

### Kit Components:

Kit Components	50T	100T
Adsorption Column and Collection Tubes	50 each	100 each
Lysate	12mL	24mL
Washing Buffer A	21mL	42mL
Washing Buffer B	9mL	18mL
Elution buffer	2mL	4mL
Digestive Solution	1.1mL	2.2mL
DNA Carrier	0.24mL	0.48mL
Specification	1	1

### Introduction:

Serum plasma free DNA extraction kit is specially used to extract free DNA in serum, plasma, pleural fluid, cerebrospinal fluid, synovial fluid, water sample and other liquid samples. This kit uses the latest high-quality imported ionic membrane, lysate and eluent have been optimized for many times, and can efficiently separate DNA. Compared with similar kits of other brands, the extracted DNA has a larger yield and higher purity, and the impurity pollution such as protein, pigment and lipid is removed to the maximum extent. It can be directly applied to PCR, fluorescent quantitative PCR and various enzyme digestion tests.

### Product Features:

1. High purity of extracted DNA, no inhibitor, A260/A280 1.7-1.9.
2. The yield is higher, 20% higher than the domestic similar products.
3. It can be used for the extraction of DNA in a small amount(200μL) of serum, plasma, pleural fluid, cerebrospinal fluid, synovial fluid, water sample and other liquid samples.
4. The operation is simple and fast, and the ideal DNA can be obtained within half an hour.
5. It does not contain toxic solvents such as phenol and chloroform, and is safe and non-toxic.

### Protocols(only for reference):

1. Prepare yourself: anhydrous ethanol, 1.5mL centrifuge tube.
2. Remove the washing solution and do as follows:
  - (1) Washing solution A: Add anhydrous ethanol according to 30% ratio of final concentration, such as add 3mL anhydrous ethanol into 7mL washing solution A; add 9mL anhydrous ethanol into

21mL washing solution A and mix thoroughly.

(2) Washing solution B: add anhydrous ethanol according to the final concentration of 70%, such as add 7mL anhydrous ethanol into 3mL washing solution B; add 21mL anhydrous ethanol into 9mL washing solution B and mix thoroughly.

(3) The prepared precipitated liquid and washing liquid can be dissolved at 37°C if precipitated. Shake well before use.

3. Take 1.5mL centrifuge tube, add 200 $\mu$ L sample, 4 $\mu$ L DNA Carrier and mix well, then add 200 $\mu$ L lysate and 20 $\mu$ L digestive solution, shake and mix well, and bathe at 65°C for 10min.
4. Add 0.9mL anhydrous ethanol and mix it upside down gently. If there is translucent suspended matter, DNA extraction and subsequent experiment will not be affected.
5. Put the adsorption column into the collection tube, transfer 700 $\mu$ L of the above solution into the adsorption column, centrifuge at 12,000rpm for 1min at 4°C, and discard the waste liquid in the collection tube;
6. Put the adsorption column back into the collection tube, transfer the remaining solution to the adsorption column, and repeat step 5.
7. Put the adsorption column back into the collection tube, add 500 $\mu$ L washing buffer A into the adsorption column, stand for 2min, centrifuge at 12,000rpm for 1min, and discard the waste liquid in the collection tube.
8. Put the adsorption column back into the collection tube, add 500 $\mu$ L washing buffer B to the adsorption column, centrifuge at 12,000rpm for 1min, and discard the waste liquid in the collection tube.
9. The adsorption column was put back into the collection tube and centrifuged at 12,000rpm for 3min to remove the residual washing buffer. At the same time, the elution buffer was taken at 30 $\mu$ L per sample(for example, 300 $\mu$ L elution buffer was taken from 10 samples), placed in a sterilized 1.5mL centrifuge tube, and preheated at 65°C for 2min.
10. Remove the adsorption column, put it into a new 1.5mL centrifuge tube, add the 30 $\mu$ L elution buffer that has been preheated, leave it for 2min, centrifuge at 12,000rpm for 2min, and collect the DNA solution. The extracted DNA can be used for the next experiment or stored at -20°C.

#### Notes:

1. Cracking liquid, washing buffer contains irritating chemicals, please take protective measures during operation, avoid direct contact with the skin, prevent inhalation nose. In case of accidental contamination of skin or eyes, rinse immediately with water or saline, and seek medical attention if necessary.
2. If white flocculent precipitates from the lysate, it is normal and can be dissolved in a water bath at 37°C.
3. In order to improve the concentration of extracted DNA, the amount of eluent can be reduced, but the minimum is not less than 15 $\mu$ L.