

Biospin Virus DNA/RNA Extraction Kit

Package

50T/100T

Application

Simultaneous purification of viral RNA and DNA from plasma, serum, and cell-free body fluids.

Principle

Lysis is performed in the presence of Protease K and Lysis Buffer, which together ensure inactivation of DNase and RNases. Binding conditions are adjusted by adding ethanol to allow optimal binding of the viral RNA and DNA to the membrane. Lysates are then transferred onto a spin column and viral nucleic acids are adsorbed onto the silica-gel membrane as the lysate is drawn through by centrifugation. Nucleic acids remain bound to the membrane, while contaminants are efficiently washed away during 3 wash steps. In a single step, highly pure viral RNA and DNA are eluted in Elution Buffer at room temperature.

Main constituents

| Cat# | BSC77S1 | BSC77M1 | Ingredients |
|-----------------|-------------|---------|--|
| Kit Content | 50T | 100T | |
| Lysis Buffer | 10 mL | 20 mL | Salt and Tris-HCl Buffer |
| Protease K(PK) | 500 μ L | 1mL | Protease K |
| Wash Buffer I | ※18mL | ※36mL | High-salt solution |
| Wash Buffer II | ※12mL | ※24mL | Low-salt solution |
| RElution Buffer | 10mL | 20mL | RNase-free H ₂ O |
| Spin Columns | 50 | 100 | Plastic parts and nucleic acid adsorption film |
| Handbook | 1 | 1 | |

PS: Buy BSC77S1 add 12mL Absolute ethanol to ※18mL Wash Buffer I before use.

add 48mL Absolute ethanol to ※12mL Wash buffer II before use.

Buy BSC77M1 add 24mL Absolute ethanol to ※36mL Wash Buffer I before use.

add 96mL Absolute ethanol to ※24mL Wash buffer II before use.

Reagent prepared by the user

Absolute ethanol (AR).

Storage and transportation

- 1) The kit can be transported at room temperature.
- 2) The kit has demonstrated stability of 12 months when stored at room temperature.

Instrument

Microcentrifuge capable of 14,000rpm, Metal bath or Water bath, Vortex mixer.

Sample requirements

If the liquid sample volume is less than 200 μ L, you can add PBS or normal saline to make the total volume to 200 μ L.

Test method

I Sample pretreatment

Animal/Plant Tissue: Grind sample fully with normal saline or PBS, take the supernatant after centrifugation.

Serum, Plasma, Ascites and other liquid samples: Extraction directly.

Fecal: Add an appropriate amount of normal saline or PBS into the samples, shake them thoroughly, centrifuge them at 12000g for 5min, and take the supernatant for extraction.

II Sample extraction operation

1. Pipet 10 μ L PK into a 1.5 mL microcentrifuge tube (not provided).
2. Add 200 μ L sample (If the sample volume \leq 200 μ L, replenish PBS or normal saline to a volume of 200 μ L) into the microcentrifuge tube.
3. Add 200 μ L Lysis Buffer. Vortex mixing 30 seconds.
4. Incubate at 56 $^{\circ}$ C for 15 min in a heating block. Briefly centrifuge the 1.5 mL tube to remove drops from the inside of the tube lid.
5. Add 250 μ L of ethanol (96–100%) to the sample, close the cap and mix thoroughly by pulse-vortexing for 15 s. Briefly centrifuge the 1.5 mL tube to remove drops from the inside of the tube lid.
6. Transfer the mixture into a Spin Column, centrifuge at 10,000 g for 1 minute and discard the flow-through.
7. Add 500 μ L Wash Buffer I into the Spin Column, centrifuge at 10,000 g for 1 minute and discard the flow-through.
8. Add 500 μ L Wash Buffer II into the Spin Column, centrifuge at 10,000 g for 1 minute and discard the flow-through.
9. Add 500 μ L Wash Buffer II into the Spin Column, centrifuge at 10,000 g for 1 minute and discard the flow-through.
10. Place the spin column in a clean 1.5 mL collection tube. Centrifuge at 10,000 g for 2 min to dry the membrane completely.

11. Place the spin column in a clean 1.5 mL collection tube. Add 50-100 μ L Elution Buffer (or RNase-free water pH>7.0) to the central of the membrane; Incubate at the room temperature for 2 minutes.
12. Centrifuge at 12,000 g for 1 minute. Remove the Spin Basket and discard. Then the buffer in the microcentrifuge tube contains the DNA/ RNA.

Notice

1. Lysis Buffer may be precipitated at low temperature, please heated at 56 $^{\circ}$ C for a few minutes to restore the clarification.
2. Wash Buffer I and Wash Buffer II add the absolute ethanol as the volume marked on bottle label and mix well.

Company Information

Manufacturer: Hangzhou Bioer Technology Co.,Ltd

Address: No.1192 Bin'An Rd, Binjiang District, Hangzhou, Zhejiang Province, China

Tel: 0571-87774567 Fax: 0571-87774553

Web: www.bioer.com.cn

Zip Code: 310053

Aftersales Service Provider: Hangzhou Bioer Technology Co.,Ltd