For research purpose only. Not for use in diagnostic procedures for clinical purposes. For IN VITRO USE ONLY.

Viral Gene-spin™ Viral DNA/RNA Extraction Kit

Cat. No. **17151** 50 columns

DESCRIPTION

Viral Gene-spin™ Kit is designed for rapid isolation of DNA or RNA from a variety of sample sources including fresh or frozen plasma, serum, other cell-free body fluids and virus-infected cell/tissue. The purified DNA/RNA is free of contaminants and impurities, and ideal for PCR and RT-PCR.

Viral Gene-spin™ Kit uses advanced silica-gel membrane technology for rapid and effective purification of DNA or RNA without organic extraction or ethanol precipitation. Furthermore, the buffering conditions are finely adjusted to provide optimum binding of the DNA/RNA to the column. Procedural directions of Viral Gene-spin™ Kit is very simple; users may purify DNA/RNA from a variety of target sources within 15min.

STORAGE

Store all components at RT.

KIT CONTENTS

- Viral Gene-spin buffer (for virus) 30ml
  : Lysis buffer
- Binding buffer 40ml
- Washing buffer A 30ml
- Washing buffer B 10ml
  : Before use, add 40ml of absolute EtOH.
- Elution buffer 20ml
- Columns 50 columns
  : Columns containing sillica membrane
- Collection tubes 50 tubes
  : Polypropylene tube for 2ml.

PROTOCOL (For Virus)

1. Transfer 150 (300) plasma, serum, urine, cell-culture supernatant, cell-free fluid or virus infection tissue or cell in the 1.5ml microcentrifuge tube.
   Note : If sample volume is less than 150 , sample should be adjusted to 150 with DEPC treated water.
2. Add 250 (500) of Viral Gene-spin buffer (Lysis buffer).
   Note: If the sample volume is larger than 150 , increase the amount of Viral Gene-spin buffer (Lysis buffer)(e.g., a 300 sample will require 500 of Viral Gene-spin buffer (Lysis buffer) and if the Viral Gene-spin buffer (Lysis buffer) become solid, incubate in 80°C for 10min.
3. Mix by vortexing for 15sec.
4. Incubate at room temperature (15-25°C) for 10 min.
   Note : If the sample is HBV, following the below step.
   1) Add 20 of Proteinase K Solution(20mg/ml, not provided)
   2) incubate at 55°C for 10min.
5. Add 350 (700) of Binding buffer, and completely mix well by gently vortexing.
   Note : If the sample volume is more than 150 , increase the amount of Binding buffer (e.g., a 300 sample will require 700 of Binding buffer). This step is conducive efficient passage of cell lysates through a column and to increase binding onto column resins and important for effective deproteinization.
6. Place a spin column in a provided 2ml collection tube.
7. Load lysates on the column and centrifuge at 13,000rpm for 1min.
   Note : The maximum volume of the column reservoirs 800 ? For sample volumes of more then 800 , simply load and spin again. If the solution has not completely passed through the membrane, centrifuge again at higher speed until all of the solution passed through.
8. Discard solution in collection tube and place the column back in the same 2ml collection tube.
9. Add 500 of Washing buffer A to column and centrifuge for 1min at 13,000rpm.
10. Discard solution in collection tube and place the spin column back in the same 2ml collection tube.
11. Add 500 of Washing buffer B to the column and centrifuge for 1min at 13,000rpm.
12. Discard solution in collection tube and and place the spin column back in the same 2ml collection tube. Centrifuge for 1min at 13,000rpm.
    Note : It is important to dry the membrane since residual ethanol may interfere with downstream reactions.
13. Place the column in a RNase-free 1.5ml microcentrifuge tube (not provided), and add 30-60 of Elution buffer directly onto the membrane.
14. Incubate at RT for 1min, and then centrifuge for 1min at 13,000rpm.
15. Use 2-5 of eluted solution for PCR or RT-PCR.