

Ver. 25081

## Virus RNA Kit

(Spin column)

Cat No. ODP315R

### Kit Contents

Contents	50 Preps
Buffer LB1	10mL
Buffer PW	15mL
Buffer GW	13mL
RNase-free Water	10 $\mu$ L
Acryl Carrier	2 $\times$ 500 $\mu$ L
RNase-free Spin column CR3 with Collection tubes (2mL)	50
Handbook	1

### Storage

Virus RNA Kit could be stored dry at room temperature (15-25°C) and is stable for 12 months without any diminution in performance and quality. For long term storage, the kit could be stored at 2-8°C. If precipitation occurs under 2-8°C, please place the kit under room temperature.

**Note:** Acryl Carrier should be stored at 4°C for 4 months, for long term storage, store at -20°C.

### Introduction

Virus RNA Kit is based on silica membrane technology and special buffer system for RNA extraction from plasma, serum and cell-free body fluids. The spin column, made of new type silica membrane can bind RNA optimally on given salt and pH conditions. Simple centrifugation completely removes contaminants and enzyme inhibitors such as RNase, proteins and divalent cations. Extracted RNA is ready to use in downstream applications like restriction analysis, PCR analysis and Southern blotting.

### Precautions

1. Repeated freezing and thawing of stored samples may lead to lower RNA yield.
2. Equilibrate the samples to room temperature.
3. Buffer LB1 uses Guanidine salt. Do not discard solution in bleach such as sodium hypochlorite as Guanidine salts produces hazardous gas when in contact with bleach.

### Materials required but not provided in the kit

1.5mL micro centrifuge tubes, Ethanol (96-100%)

## Protocol

**Ensure that Buffer GW and PW have been prepared with appropriate volume of ethanol (96-100%) as indicated on the bottle and shake thoroughly.**

1. Briefly mix the sample.
2. Take 200µL sample in 1.5mL microcentrifuge tube.
3. Take 200µL of Buffer LB1 to it and mix thoroughly by vortexing.
4. Add 20µL of Acryl Carrier and mix the contents by vortexing and incubate at room temperature for 10 minutes.
5. Add 250µL of Ethanol (96-100%) to the sample, close the cap and mix thoroughly by vortexing for 15 seconds.

**Note: Cool ethanol (96-100%) on ice before use if the room temperature is more than 25°C.**

6. Pipette the mixture into the spin column CR3 (in a 2mL collection tube), keep the column for 5 minutes at room temperature and centrifuge at 10,000 rpm for 1 minute. Discard the flow-through and place the spin column CR3 back to the collection tube.
7. Add 500µL Buffer GW to spin column CR3 and centrifuge at 10,000 rpm for 1 minute. Discard the flow-through and place the spin column back to the collection tube.
8. Add 700µL Buffer PW to spin column CR3 and centrifuge 10,000 rpm for 1 minute. Discard the flow-through and place the spin column back to the collection tube.
9. Re-centrifuge the spin column CR3 placed in collection tube at 10,000 rpm for 2 minutes and discard the flow-through.
10. Place the spin column CR3 to a new 1.5mL micro-centrifuge tube and pipette 50µL RNase-free Water directly to the center of membrane. Incubate at room temperature (15-25°C) for 3 minutes. Then centrifuge at 10,000 rpm for 1 minute.
11. The elute can be used for further downstream processes. For longer shelf life, store at -20°C.