EasyPure® Simple Viral DNA/RNA Kit

Please read the datasheet carefully prior to use.

Cat.No. ER211

Storage: At room temperature (15°C-25°C) in a dry place for one year.

Description

EasyPure® Viral DNA/RNA Kit utilizes a unique lysis buffer to lyse virus and release DNA / RNA. The released DNA / RNA is effectively purified after specifically binding to a silica-based spin column. It is suitable for isolating viral DNA/RNA from up to 200 µl of plasma, serum, whole blood, tissue homogenate, cell-free body fluid, nasopharyngeal or oropharyngeal aspirate/wash, bronchoalveolar lavage fluid (BALF), tracheal aspirate, sputum, nasopharyngeal or oropharyngeal swab and animal cell culture supernatant. The isolated DNA/RNA with high purity can be applied in PCR, RT-PCR, qPCR, qRT-PCR, etc.

Kit Contents

Component	ER211-01 (50 rxns)	ER211-02 (200 rxns)
Binding Buffer 37 (BB37)	12 ml	48 ml
Clean Buffer 37 (CB37)	15 ml	60 ml
Wash Buffer 37 (WB37)	6 ml	24 ml
RNase-free Water	10 ml	20 ml
RNase-free Tube (1.5 ml)	50 each	200 each
RNA Spin Columns with Collection Tubes	50 each	200 each

Sample requirement

- Store at 4°C for no more than 72 hours; at -70°C for long term storage
- Avoid repeated freezing and thawing
- Swab samples should only be collected with synthetic tip swabs (such as polyester or Dacron®) with aluminum or plastic shafts.

Procedure

Before starting, add different volumes of isopropanol to BB37 and add different volumes of anhydrous ethanol WB37.

Component	ER211-01 (50 rxns)	ER211-02 (200 rxns)
Binding Buffer 37 (BB37)	4 ml isopropanol	16 ml isopropanol
Wash Buffer 37 (WB37)	24 ml anhydrous ethanol	96 ml anhydrous ethanol

1. Sample processing

• Liquid samples

(a) Add 200 µl BB37 to a sterile 1.5 ml microcentrifuge tube.

(b) Add 200 µl of sample to the microcentrifuge tube. Mix by vortexing for 15 seconds.

Note: If the sample volume is less than 200 µl, please add PBS or 0.9% NaCl to bring the total volume to 200 µl.

(c) Incubate at room temperature for 15 minutes.

(d) Add 250 µl of anhydrous ethanol (flocculation may appear at this stage). Mix by vortexing for 15 seconds.

• Solid samples (e.g., swabs)

(a) Vortex the single swab head and all the storage solution together for 1 minute to fully wash off the sample adhered to the swab.

(b) Pipette 200 µl of the above swab eluent into a sterile 1.5ml centrifuge tube, add 200 µl BB37. Mix by vortexing.

(c) Incubate at room temperature for 10 minutes.

(d) Add 250 µl of anhydrous ethanol, and mix by vortexing for 15 seconds.

• For viscous liquids such as sputum, refer to "Solid Samples"

2. Transfer the entire contents to a spin column, centrifuge at 12,000×g for 1 minute, and discard the flow through. If the total volume is > 650 µl, load twice.
3. Add 500 µl of CB37. Centrifuge at 12,000×g for 1 minute and discard the flow through.
4. Add 500 µl of WB37. Centrifuge at 12,000×g for 1 minute and discard the flow through.
5. Centrifuge at 12000×g for 1 minute to remove the residual ethanol completely.
6. Place the spin column into a new RNase-free 1.5 ml microcentrifuge tube. Add 20-50 µl of RNase-free Water to the center of the column, and incubate at room temperature for 1 minute.
7. Centrifuge at 12000×g for 1 minute to elute DNA/RNA
8. Store the eluted DNA (at -20°C) or RNA (at -70°C).

Notes

• All the centrifugation steps are carried out at room temperature.
• Please check to make sure that anhydrous ethanol has been added into BB37 before use.
• Please check to make sure that anhydrous ethanol has been added into CB37 before use.

FOR RESEARCH USE ONLY