FT-BY37A0

Advion Interchim scientific

Viral DNA/RNA Mini Kit

For different cultured cells supernatant, tissue homogenate and swabs-derived samples

Product Description

Catalog #: BY37A0, 100 rxn

Name : **Viral DNA/RNA Mini Kit - for Amplification and NGS Ready Sample**

Description : The Viral DNA/RNA Mini Kit provides a rapid method for extracting viral DNA/RNA from different cultured cells supernatant, tissue homogenate and swabs-derived samples.The kit is based on silica gel membrane purification technology and does not require β-mercaptoethanol, phenol/chloroform, or any other toxic reagent during the extraction process. The isolated RNA/DNA, characterized by high purity and no residual of impurities, can be applied to reverse transcription, RT-PCR, conventional PCR, NGS and Northern blotting.

Components :

Buffer VL	50 ml	Assist in sample lysis;
Buffer RW	120 ml	Remove impurities such as proteins and salts;
RNase-free ddH2O	6 ml	Elute DNA/RNA absorbed by the column;
RNA Columns	100	Specifically absorb DNA/RNA;
Collection Tubes 2 ml	100	Collect filtrate;
RNase-free Collection Tubes 1.5 ml	100	Collect DNA/RNA.

Storage : Store at 15 ~ 25℃ and transport at room temperature.

For Research Use Only

Workflows

Sample Lysis:
Prepare 200 µl sample, add 500 µl Buffer VL, vortex and mix for 15- 30 sec and centrifuge the mixture to the bottom of centrifuge tubes.

DNA/RNA Absorption:
Transfer the mixture to RNA Columns, centrifuge at 12,000 rpm (13,400 × g) for 1 min and discard the filtrate.

Impurity Removal:
Add 600 µl Buffer RW, centrifuge at 12,000 rpm (13,400 × g) for 30 sec, discard the filtrate, and repeat above steps again. Centrifuge the empty column at 12,000 rpm (13,400 × g) for 2 min.

DNA/RNA Elution:
Add 30 - 50 µl RNase-free ddH2O, keep the column still at room temperature for 1 min and centrifuge the column at 12,000 rpm (13,400 × g) for 1 min.

Self-Prepared Materials

RNase-free pipette, 1.5 ml RNase-free centrifuge tube, centrifugal machine, vortex oscillator, RNase-free pipette tips

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Notes

1. Equilibrate sample to room temperature before use.
2. The virus may be highly contagious, so some protective measures should be taken.
3. Repeated freeze-thaw should be avoided in case the extracted viral DNA/RNA degrade.
4. Some instruments and consumables should be prepared before use, RNase-free pipette, 1.5 ml RNase-free centrifuge tube, centrifugal machine, vortex oscillator, RNase-free pipette tips.
5. When using this kit, please wear laboratory coat, disposable latex gloves, disposable mask and use RNase-free consumables to prevent RNase contamination.
6. All steps should be performed at room temperature unless otherwise stated.

Protocol

The following steps should be performed inside the laboratory biosafety cabinet.

1. Add 200µl sample to RNase-free centrifuge tube(complement using PBS or 0.9% NaCl when the sample volume is less than 200ul), then add 500 µl Buffer VL, vortex and mix thoroughly for 15 - 30 sec, and centrifuge the mixture to the bottom of centrifuge tubes.
2. Put RNA Columns inside the Collection Tubes 2 ml, transfer the mixture of Step 1 to RNA Columns, centrifuge the columns at 12,000 rpm (13,400 × g) for 1 min and discard the filtrate.
3. Add 600 µl Buffer RW inside the RNA Columns, centrifuge at 12,000 rpm (13,400 × g) for 30 sec and discard the filtrate.
4. Repeat the Step 3.
5.Centrifuge the empty columns at 12,000 rpm (13,400 × g) for 2 min.
6. Transfer RNA Columns of Step 5 inside another RNase-free Collection Tubes 1.5 ml (Provided in the kit) meticulously, add 30 - 50 µl RNase-free ddH2O to the RNA Columns, keep still for 1 min and then centrifuge at 12,000 rpm (13,400 × g) for 1 min.
7. Discard the RNA Columns, and the harvested DNA/RNA can be applied to subsequent assays instantly or kept at -30 ~ -15℃ for short-term storage or -85 ~ -65℃ for long-term storage.

FAQ & Trouble Shooting

◇ Absorption Columns Clogged

← Excessive impurities

Prepare cell-free samples or obtain the supernatant of cells for subsequent assays

◇ No DNA/RNA or very low yield

← The samples underwent repeat freeze-thaw

Use fresh samples and avoid freeze-thaw

← DNA/RNA content of samples was very low

Add some reagents to facilitate the precipitation of DNA/RNA

← The elution was not thorough

Add RNase-free ddH2O to the center of the membrane and reduce the elution volume as appropriate. Preheat the RNase free ddH2O to 65℃, and prolong the incubation time or perform secondary elution

← The samples were not equilibrated to room temperature

Equilibrate the samples to room temperature before using the kit

◇ Inhibition of downstream assays or low purity of extracted RNA/DNA

← Salt residues

Ensure the twice elution using Buffer RW. Additionally, add Buffer RW to the sides of the adsorption column or close the lid of the column and invert 2 to 3 times after adding Buffer RW, which can help to completely wash away any salts on the sides of the column.

← Ethanol residues

Perform the Step 5 and then keep the empty column still at room temperature for 5 min

Ordering information

Catalog size quantities and prices may be found at https://www.interchim.com.
Please inquire for higher quantities (availability, shipment conditions).
Please contact InterBioTech – Interchim for any other information
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