MQ Viral DNA Extraction Kit

Cat No. VDE-M-001-50
Size: 50 preps

MOLEQULE-ON®

Components	VDE-M-001-50 (50 Preps)
Lysis Buffer V	30 ml
Wash Solution (concentrate)	15 ml
TE Buffer	10 ml
MQ Spin Column and 2.0ml Collection Tube	50

NOTE 1: Lysis Buffer V Reagent contains chaotropic salt. Avoid contact with skin and eyes.
NOTE 2: Wash Solution is supplied as concentrates. **Add 45 ml ethanol (96-100%) to 15 ml Wash Solution** before use.

Description

MQ Viral DNA Extraction Kit provides a fast, simple and highly reproducible method for isolation of viral DNA from broad range cell-free clinical samples including serum, urine and plasma for clinical research and life science applications. Viral DNA in lysates is selectively absorbed in spin column and other impurities don't bind in the column. The procedure is simple and fast, no phenol extraction is required. Purified viral DNA can be used for PCR, Real Time PCR and other clinical research applications.

Features

- Fast and easy processing using a rapid spin-column format. The entire procedure takes approx. 20 minutes only.
- Sensitive. 30-50 virus particles in 1 ml of sample can be detected by PCR.
- No phenol/chloroform and no ethanol precipitation are required.
- Compatible with PCR, Real Time PCR and other clinical applications.
- Suitable for broad range cell-free clinical samples including serum, urine and plasma.
- No toxic. The kit does not contain toxic reagents.

Storage

Store Lysis Buffer V at 4°C. Store other components at room temperature (15-25°C).

Materials Supplied by User

- Microcentrifuge capable of at least 12,000 × g
- Pipettes and pipette tips
- Vortexer
- Ethanol (96-100%)
- Microcentrifuge tubes (1.5 ml or 2 ml)
- Water bath for heating at 65°C

Protocol

1. Sample preparation

A) For liquid viral sample: Enrichment of virus. Transfer appropriate liquid sample to a new 1.5 ml micro-centrifuge tube, centrifuge at 24,000 g for 60 minutes at 4°C. Keep approximately 0.2 ml solution in the tube but discard the rest. Proceed to step 2.

B) For swab sample: Place the swab into a clean 1.5 ml micro-centrifuge tube, and snap off the handle. Add 1 ml physiological saline, vortex for 30 seconds. Then transfer 0.2 ml solution to a new 1.5 ml micro-centrifuge tube. Proceed to step 2.

2. Add 0.6 ml (600ul) of Lysis Buffer V Reagent into the tube (step 1), vortex vigorously for 30 seconds; incubate at room temperature or 65°C for 10 min.

NOTE: Lysis-Buffer-V may form precipitation at 4°C. Dissolve it at 65°C and mix well before use.

3. Transfer the mixture into the MQ spin column. Keep at room temperature for 2 minutes.

4. Spin at 10,000 g for 1 minute, discard the flow-through.

5. Add 0.5 ml of Wash Solution to the column, spin at 10,000 g for 1 minute, and discard the flow-through.

6. Repeat the Step 5 once.

7. Centrifuge at 10,000 g for 1 minute, discard the flow-through residue.

8. Transfer the column to a new 1.5 ml micro-centrifuge tube,. Add 30-100 µl of TE Buffer onto the centre of the column; keep at room temperature for 2 minutes.

NOTE: Pre-warm TE Buffer at 60-80°C may improve the recovery of DNA.

9. Spin at 10,000 g for 1 minute. Purified viral DNA is ready for use or keep at -20°C for long term storage.