



PRODUCT INFORMATION

**Rapid Viral RNA Extraction Kit**

**Product information for VT4184:**

**Component:**

Component	VT4184, 50 Preps
Buffer VG	30 ml
RNase-free Water	5 ml
Protocol	1

**Storage:**

The kit is valid for 1 year at 4°C.

**Introduction:**

The kit is designed for preparation of high quality viral RNA from cell-free liquid specimens including blood serum, urine, body fluids. This method is fast and easy to perform. No mechanical disruption or column purification is required. Purified RNA is ready for most downstream applications such as RT-PCR, Northern Blotting, Poly A+ purification, nuclease protection and in vitro translation.



**Features:**

1. High recovery yield. >90% of viral RNA can be recovered.
2. Simple and rapid procedure. Entire procedure takes less than 30 minutes and can be completed in one tube.
3. High Quality of viral RNA: Complete removal of contaminants. Isolation of total RNA for use in a large range of applications
4. Economic.

**Materials Supplied by User:**

Microcentrifuge capable of at least 12,000 × g  
RNase-Free pipets and pipet tips  
Vortexer  
RNase-Free Ethanol (96-100%)  
RNase-Free Microcentrifuge tubes (1.5 ml or 2 ml)

**Protocol:**

**1. Sample preparation**

A. For liquid viral sample: Enrichment of virus. Transfer appropriate liquid sample to a new 1.5 ml microtube, centrifuge at 24,000 g for 60 min at 4°C. Then keep approx 0.2 ml solution in the tube but discard the others. Proceed the step 2.

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

**2. Add 0.6 ml of Buffer Rlysis-VG into the tube (step 1), vortex vigorously for 30 sec, incubate at room temperature for 10 min.**

**Note:** Buffer VG may form precipitation at 4°C, please dissolve it at 65°C and mix well before use.

**3. Vortex the tube and add 0.7 ml isopropanol to the tube,**



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vortex for 30 seconds.

4. Centrifuge at 13,000-15,000  $x g$  for 15 minutes at room temperature, discard the supernatant carefully.
5. Add 1 ml pre-cold RNase-free 75% ethanol to the tube, mix well by inverting 10 times. Centrifuge at 15,000  $x g$  for 5 minute, discard the supernatant carefully.
6. Air-dry the pellet at room temperature with the lid open for 2~5 minutes.

**Note1:** This step is very important, residual ethanol in RNA will interfere some downstream applications.

**Note2:** Don't over dry.

7. Add 30~50  $\mu l$  RNase-free Water to dissolve RNA pellet. The purified RNA is ready for use. Or keep at  $-70^{\circ}C$  for long term storage.

**Note1:** This RNA solution may contain insoluble marterial, don't centrifuge to remove the insoluble marterial. Use the mixture for RT-PCR.



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