

## FineMag Quick Viral DNA/RNA Kit

### 【Product Name】

Common name: FineMag Quick Viral DNA/RNA Kit

### 【Product Number】

Article number: WLDR8202-ES

### 【Kit Contents】

| Content                          | Quality (64 preps/box) |
|----------------------------------|------------------------|
| Nucleic acid extraction reagents | 4 x (16 preps /plate)  |
| Tip Combs                        | 8                      |

### 【Viral DNA/RNA Kit Content】

| 1/7              | 2/8         | 3/9         | 4/10        | 5/11        | 6/12                          |
|------------------|-------------|-------------|-------------|-------------|-------------------------------|
| Buffer MWP       | Buffer MVN  | Buffer ASW  | Buffer MWP  | Buffer MWP  | RNase free ddH <sub>2</sub> O |
| Magnetic beads G |             |             |             |             |                               |
| 10 $\mu$ l       | 500 $\mu$ l | 500 $\mu$ l | 500 $\mu$ l | 500 $\mu$ l | 60 $\mu$ l                    |
| 400 $\mu$ l      |             |             |             |             |                               |

\*This Kit is for Scientific Research Use Only. Don't use in medicine , clinical treatment ,food or cosmetics,etc.

### 【Product Overview】

FineMag Quick Viral DNA/RNA Kit is based on magnetic bead separation and purification, which is suitable for high-quality viral nucleic acid purification from saliva, whole blood, serum, plasma, lymph, cell-free body fluid, cell culture supernatant, tissue homogenate or various virus preservation solutions without the need for toxic phenol-chloroform extraction or time-consuming alcohol precipitation. The kit can be integrated with a magnetic bar method or an automatic nucleic acid extractor by pipetting for high-throughput extraction experiments, and can also be manually operated using a magnetic separation rack.

The FineMag purification system is based on superparamagnetic nano-magnetic particles, which can specifically adsorb nucleic acid through hydrogen bonding and electrostatic under the condition of high concentration of chaotropic agent, while protein or a small amount of other non-specifically adsorbed impurities are washed is removed and the nucleic acid is finally eluted with low salt buffer or RNase Free ddH<sub>2</sub>O. The purified nucleic acid can be suitable for various routine operations, including RT-PCR, qRT-PCR, fluorescence quantitative PCR and other downstream experiments.

### 【Applicable instruments】

GENFINE Purifier 32 or Purifier M32

### 【Automated extraction procedure】

#### 1.Preparation of Prepackaged deep well plate

Please Take out the pre-packaged deep-well plate, invert and mix several times to resuspend the magnetic beads, and gently shake the plate to make the reagents and magnetic beads concentrate on the bottom of the plate.(You can also use a plate centrifuge, 500 rpm × 1min for centrifugation), carefully tear off the aluminum foil sealing film to avoid vibration of the plate and prevent liquid from splashing before use.

#### 2.Preparation of Sample Columns

2.1 Add 300  $\mu$  L of samples to the 2nd column and 8th column of the 96-deep-well plate (the samples need to be equilibrated to room temperature), and place the 96-deep-well plate on the 96-deep-well plate base of the 32-channel automatic nucleic acid extractor.

2.2 Insert the Tip Combs into the card slot of the 32-channel automatic nucleic acid extraction instrument.

**2.3** Select the program and run it.

Y503-G20 program (Purifier 32)

| Steps | Pos. | Content | Waiting time (s) | Mixing time (s) | Amplitude | Strength | Magnetic attraction time (s) | Cycles | Model                  | volume (μL) | Temp (°C) |
|-------|------|---------|------------------|-----------------|-----------|----------|------------------------------|--------|------------------------|-------------|-----------|
| 1     | 1    | binding | 0                | 20              | Medium    | High     | 15                           | 1      | Step-by-step magnetism | 400         |           |
| 2     | 2    | binding | 0                | 180             | Medium    | High     | 45                           | 1      | Step-by-step magnetism | 800         | 90        |
| 3     | 3    | washing | 0                | 60              | Medium    | High     | 15                           | 1      | Step-by-step magnetism | 500         |           |
| 4     | 4    | washing | 0                | 60              | Medium    | High     | 15                           | 1      | Step-by-step magnetism | 500         |           |
| 5     | 5    | washing | 0                | 60              | Medium    | High     | 15                           | 1      | Step-by-step magnetism | 500         |           |
| 6     | 6    | elution | 60               | 120             | Medium    | High     | 15                           | 2      | Step-by-step magnetism | 100         | 90        |
| 7     | 1    | discard | 0                | 15              | Medium    | High     | 0                            | -      | Step-by-step magnetism | 400         |           |

Y503-G20 program (Purifier M32)

| Steps | Pos. | Content | Waiting time (s) | Mixing time (s) | Magnetic attraction time (s) | volume (μL) | Mixing Speed (s) | Temp. (°C) |
|-------|------|---------|------------------|-----------------|------------------------------|-------------|------------------|------------|
| 1     | 1    | binding | 0                | 10              | 10                           | 400         | 10               |            |
| 2     | 2    | binding | 0                | 130             | 25                           | 800         | 8                | 90         |
| 3     | 3    | washing | 0                | 35              | 10                           | 500         | 10               |            |
| 4     | 4    | washing | 0                | 35              | 10                           | 500         | 10               |            |
| 5     | 5    | washing | 0                | 35              | 10                           | 500         | 10               |            |
| 6     | 6    | elution | 60               | 80              | 20                           | 100         | 10               | 90         |
| 7     | 1    | discard | 0                | 10              | 0                            | 400         | 10               |            |

**2.4** After the automated procedure, take out the DNA samples from columns 6 and 12, seal them with parafilm and store them at -20°C

**【Storage conditions】**

- Under dry conditions at room temperature (15-25) °C.
- Full activity is guaranteed for 12 months.

**【Notice】**

- Repeated freezing and thawing of samples should be avoided, otherwise the amount of nucleic acid extraction will be reduced. Samples can be extracted immediately or stored at 4°C for up to 24 hours. For long-term storage, it can be stored at -20°C or -80°C frozen.
- During the extraction of viral DNA/RNA with this kit, please take care to prevent nucleic acid degradation. The utensils and sample applicators used should be dedicated, and disposable consumables such as centrifuge tubes and pipette tips should be autoclaved. The Operators must wear powder-free gloves, masks, etc.
- Please read the instructions carefully before use, and operate in strict accordance with the instructions. Clinical samples should be operated in a clean bench or a biological safety cabinet.
- There may be residual magnetic beads during elution, When you aspirate samples, please avoid aspirating magnetic beads.
- After properly disposing of the samples and reagent materials used, please thoroughly clean and disinfect the work surfaces used.

**【Ordering information and technical support】**

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