

# FavorPrep<sup>™</sup> Viral Nucleic Acid Extraction Kit I

# User Manual

For Research Only

Cat. No.: FAVNK001 (50 Preps) FAVNK001-1 (100 Preps)

#### Introduction

FavorPrep Viral Nucleic Acid Extraction Mini Kit is desigened for extraction of Viral DNA or RNA from cell free fluides such as serum, plasma, body fluid and cell cultured supernatant. This method first lyses viruus by using a chaotropic salt, then binds Nucleic Acid to silica-based membranes. After washing with ethanol-contained wash buffer, contaminants and enzyme inhibitors will be removed completely. It takes only 20 min for an entire procedure, and the pyrified nucleic acid is ready for PT-PCR and PCR.

## **Kit Contents**

	FAVNK001	FAVNK001-1
VNE Buffer	35 ml	75 ml
Wash 1 Buffer	30 ml	60 ml
Wash 2 Buffer (concentrated)	10 ml*	20 ml**
RNase-free Water	6 ml	6 ml
Carrier RNA	0.8 mg	0.4 mg
VNE Column	50 pcs	100 pcs
Collection Tube	100 pcs	200 pcs
Elution Tube	50 pcs	100 pcs
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\*Add 40 ml ethanol (96~100%) to Wash 2 Buffer when first open. \*\*Add 80 ml ethanol (96~100%) to Wash 2 Buffer when first open.

# **Specification**

Sample: 150 µl of plasma, serum, body fluid and cell cultured supernatant. Handing time: 20 min. Elution Volume: 50 µl.

### **Important Notes**

- 1. Make sure everything is RNase-free when handling this system.
- 2. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffers.
- 3. Add 1 ml of VNE Buffer to the tube of lyophilized Carrier RNA, mix well by vortexing and transfer the mixture to the VNE Buffer when first open. Store the Carrier RNA added VNE Buffer at 4 °C.
- 4. For FAVNK001, add 40 ml ethanol (96-100%) to Wash 2 Buffer when first open. For FAVNK001-1, add 80 ml ethanol (96-100%) to Wash 2 Buffer when first open.
- 5. Preheat RNase-free H<sub>2</sub>O to 75°C for elution step (step 9).

# **Brief Procedure**



# **General Protocol:**

#### Please Read Important Notes Before Starting Following Steps.

1. Transfer 150 µl of sample (serum, plasma, body fluids or cell cultured supernatant ) into a microcentrifuge tube (not provided) and mix well by vortexing.

--If the sample volume is more than 150 µl, separate it into multiple tubes.

- Add 570 µl of VNE Buffer (Carrier RNA added) to the sample, mix well by vortexing, and incubate for 10 minutes at room temperature.
   -Make sure that Carrier RNA has been added to the VNE Buffer when first use.
- 3. Add 570 µl of ethanol (96~100%) to the sample mixture, mix well by vortexing.
- 4. Place a VNE column into a Collection Tube, and transfer 750 µl of sample mixture (ethanol added) to the VNE Column, centrifuge at 6,000 x g ( 8,000 rpm) for 1 min then discard the flow-through.
- 5. Repeat Step 4. for the rest sample mixture. Then transfer the VNE Column to a *new* Collection Tube.
- 6. Add 500 μl of Wash 1 Buffer to the VNE Column. Centrifuge at 6000 x g ( 8,000 rpm) for 1 min then discard the flow-through.
- 7. Add 750 µl of Wash 2 Buffer (ethanol added) to VNE Column. Centrifuge at 6,000 x g ( 8,000 rpm) for 1 min then discard the flow-through.
  --Make sure that ethanol (96~100%) has been added into Wash 2 Buffer when first open.

8. Centrifuge at full speed (14,000 rpm) for an additional 3 min to dry the VNE column.

--Important step! This step will avoid the residual liquid to inhibit subsequent enzymatic reactions.

9. Place VNE Column into a Elution Tube, Add 50 µl of RNase-free H2O to the membrane center of the VNE Column. Stand VNE Column for 2 min.

--Important step! For effective elution, make sure that the RNase-free H2O is dispensed onto the membrane center and is absorbed completely.

- 10. Centrifuge for 1 min to elute the nucleic acid.
- 11. Store nucleic acid at -70 °C.



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