

FavorPrep™ Viral Nucleic Acid Extraction Kit II

- For isolation of viral nucleic acid from cell-free fluid such as, serum, plasma, body fluid and cell cultured supernatant

Cat.No. : FAVNK 000-2, 4 Preps
 FAVNK 002, 50 Preps
 FAVNK 002-1, 100 Preps
 FAVNK 002-2, 300 Preps

Kit Contents:

(For Research Use Only)

	FAVNK 000-2 (4 preps_sample)	FAVNK 002 (50 preps)	FAVNK 002-1 (100 preps)	FAVNK 002-2 (300 preps)
AD Buffer * (concentrate)	0.4 ml	4 ml	8 ml	24 ml
VNE Buffer	1.8 ml x 2	30 ml	60 ml	180 ml
Wash Buffer 1 * (concentrate)	0.9 ml x 2	22 ml	44 ml	132 ml
Wash Buffer 2 * (concentrate)	1.5 ml	20 ml	20 ml x 2	50 ml x 2
RNase-free Water	0.5 ml	6 ml	12 ml	30 ml
VNE Column	4 pcs	50 pcs	100 pcs	300 pcs
Collection Tube	8 pcs	100 pcs	200 pcs	600 pcs
Elution Tube	4 pcs	50 pcs	100 pcs	300 pcs
User Manual	1	1	1	1

* Preparation of AD Buffer, Wash Buffer 1 and Wash Buffer 2 for first use:

Cat. No:	FAVNK 000-2 (4 preps)	FAVNK 002 (50 preps)	FAVNK 002-1 (100 preps)	FAVNK 002-2 (300 preps)
Ethanol volume for AD Buffer	3 ml	30 ml	60 ml	180 ml
Ethanol volume for Wash Buffer 1	0.33 ml	8 ml	16 ml	48 ml
Ethanol volume for Wash Buffer 2	6 ml	80 ml	80 ml	200 ml

Specification:

Principle: spin column (silica membrane)

Sample: 200 µl cell-free fluid such as serum, plasma, body fluid
 and cell cultured supernatant

Length of recovery nucleic acid: >200 bp

Binding capacity: 60 µg/column

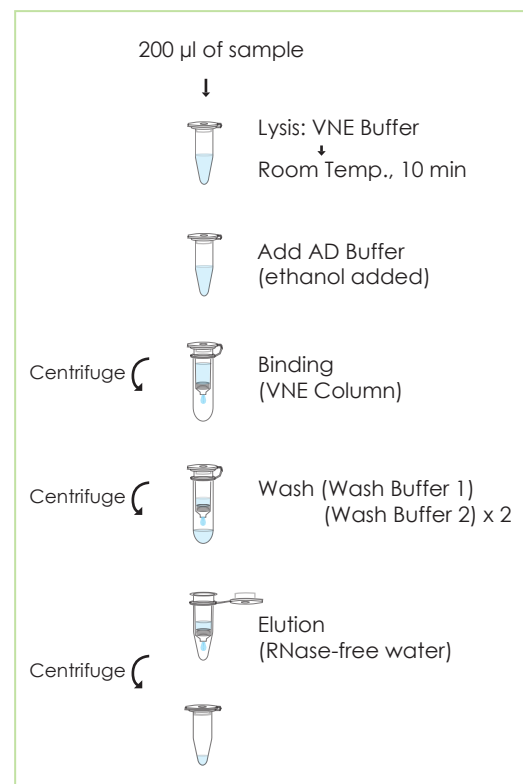
Recovery rate: 70~90%

Elution volume: 30~60 µl

Operation time: 20 min

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 required ethanol (96~100%) to AD Buffer, Wash Buffer 1 and Wash Buffer 2 before use.
4. Preheat RNase-free water to 70°C for elution step. (step:11)



General Protocol:

Please Read Important Notes Before Starting Following Steps.

HINT: Preheat RNase-free water 70°C for step 11 (elution step).

1. Transfer 200 µl of sample (serum, plasma, body fluids or cell cultured supernatant) into a microcentrifuge tube (not provided).
-- If prepared sample is less than 200 µl , adjust sample volume to 200 µl with PBS (not provided).
2. Add 500 µl of VNE Buffer the sample, mix well by vortexing, and incubate for 10 minutes at room temperature.
3. Add 550 µl of AD Buffer (ethanol added) to the sample mixture and mix well immediately by plus-vortexing.
-- Make sure that ethanol has been added into AD Buffer when first open.
4. Place a VNE column to a Collection Tube (provided).
5. Transfer up to 750 µl of sample mixture (ethanol added) to the VNE Column, centrifuge at 8,000 x g for 1 minute then discard the flow-through. Place the VNE Column back to the Collection Tube.
6. Transfer the rest of sample mixture (ethanol added) to the VNE Column, centrifuge at 8,000 x g for 1 minute.
Discard the flow-through and the Collection Tube. Place the VNE Column to a new Collection Tube (provided).
7. Add 500 µl of Wash Buffer 1 (ethanol added) to the VNE Column, centrifuge at 8,000 x g for 1 minute then discard the flow-through.
Place the VNE Column back to the used Collection Tube.
--Make sure that ethanol (96~100%) has been added into Wash Buffer 1 when first open.
8. Add 750 µl of Wash Buffer 2 (ethanol added) to the VNE Column, centrifuge at 8,000 x g for 1 minute then discard the flow-through.
Place the VNE Column back to the Collection Tube.
--Make sure that ethanol (96~100%) has been added into Wash Buffer 2 when first open.
9. Repeat step 8.
10. Centrifuge at full speed (~18,000 x g) for an additional 3 minutes to dry the VNE column. Discard the flow-through and the Collection Tube.
--Important step! This step will avoid the residual liquid to inhibit the subsequent enzymatic reactions.
11. Place the VNE Column to an Elution Tube (provided). Add 30~60 µl of preheated RNase-free Water to the membrane center of the VNE Column. Stand VNE Column for 2 minutes.
--Important step! For effective elution, make sure that the RNase-free Water is dispensed onto the membrane center and is absorbed completely.
12. Centrifuge for 2 minutes to elute the nucleic acid.
13. Store nucleic acid at -70°C.

Troubleshooting

Problems	Possible reasons	Solutions
Low nucleic acid yield		
	Incorrect preparation of Wash Buffer 1 or Wash Buffer 2	Make sure that the correct volumes of ethanol (96-100 %) is added into AD Buffer, Wash Buffer 1 and Wash Buffer 2 when first open. Repeat the extraction procedure with a new sample.
	AD Buffer, Wash Buffer 1 and Wash Buffer 2 is not mixed with ethanol before use	
	The volume or the percentage of ethanol is not correct before adding into AD Buffer, Wash Buffer 1 and Wash Buffer 2	
	Incorrect elution conditions	After RNase-free water is added, stand the VNE Column for 2 min before centrifugation.
	RNase-free water not completely absorbed by column membrane	
Column is clogged		
	Sample is too viscous	Reduce the sample volume.
Degradation of elutated DNA		
	Sample is old	Always use fresh or well-stored sample viral nucleic acid extraction.