Australian distributors:
Fisher Biotec Australia
free call: 1800 066 077
email: info@fisherbiotec.com
web: www.fisherbiotec.com

FavorPrep™
96-well Viral DNA/ RNA Extraction Kit

User Manual

Cat. No.:FAVRE000
FAVRE001
FAVRE002

For Research Use Only
v.1103-1

Introduction

FavorPrep 96-Well Viral DNA/ RNA Kit is designed for high-throughput extraction of viral DNA/ RNA from cell free sample such as serum, plasma, body fluids and the supernatant of cell cultures. The method use a specialized chaotropic salt to lyse viruses, then DNA/ RNA in chaotropic salt is bonded to glass fiber matrix when the lysis mixture passing through the binding plate. After washing off the contaminants, the purified DNA/ RNA is eluted by RNase free water. The entire procedure can be completed in one hour without phenol/ chloroform extraction and alcohol precipitation. In the procedure, DNA/ RNA binding and washing steps could be do on vacuum manifold or by centrifuge. And the eluted DNA/ RNA is ready to use in different application.

Kit Content

	FAVRE000 (1X96 preps)	FAVRE001 (4X96 preps)	FAVRE002 (10X96 preps)
VNE Buffer	50 ml	200 ml	500 ml
AD Buffer (concentrated)*	4.8 ml	18 ml	48ml
Wash Buffer 1 (concentrated)*	33 ml	132 ml	330 ml
Wash Buffer 2 (concentrated)*	15 ml	30 ml x 2	50 ml &100ml
RNase-free Water	15 ml	30 ml	75 ml
96-Well viral RNA/ DNA binding plate	1 pcs	4 pcs	10 pcs
96-Well PCR plate	1 pcs	4 pcs	10 pcs
Adhesive film	2 pcs	8 pcs	20 pcs

* Add the indicated volume of ethanol (96-100%) to concentrated AD Buffer, Wash1 Buffer and Wash2 Buffer when first use.

	FAVRE000 (1X96 preps)	FAVRE001 (4X96 preps)	FAVRE002 (10X96 preps)
AD Buffer (concentrated) *	4.8 ml add 36 ml ethanol	18 ml add 135 ml ethanol	48 ml add 360 ml ethanol
Wash Buffer 1 (concentrated) *	33 ml add 12 ml ethanol	132 ml add 48 ml ethanol	330 ml add 120 ml ethanol
Wash Buffer 2 (concentrated) *	15 ml add 60 ml ethanol	30 ml add 120 ml ethanol	50 ml & 100 ml add 200 ml & 400ml ethanol

Step 4: Second washing

- Add 600 µl of Wash 2 Buffer (ethanol added) to each well of the 96-Well Viral DNA/ RNA Binding Plate.
- Apply vacuum at 10 inches Hg for 5 minutes until wells have emptied.
- Apply vacuum at 10 inches Hg for an additional 10 min (or incubate at 60 °C for 10 min) to remove residual ethanol.

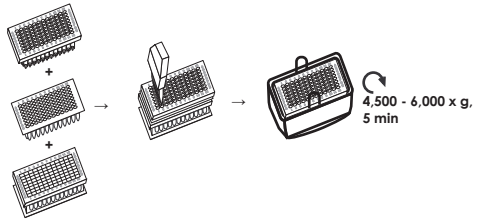
vacuum at 10 inches Hg ,15 min

or

incubate at 65°C for ,5 min

STEP 5: DNA/ RNA Elution

- Place a clean 96-well PCR Plate (provided) on top of a clean 96-Well 2 ml Plate (not provided). And place the 96-Well Viral DNA/ RNA Binding Plate on top of the clean 96-Well PCR plate. (top: 96-Well Viral DNA/ RNA Binding Plate, middle: 96-well PCR Plate, bottom: 96-Well 2 ml plate)
- Add 50 ~ 75 µl of RNase-free water on the membrane center of the 96-Well Viral DNA/ RNA Binding Plate. Stand for 3 minutes until RNase-free water has been absorbed by the membrane completely.
- Place the combined plates in a rotor bucket and centrifuge for 5 min at 4,500 – 6,000 x g for 5 min to elute purified DNA.



Specification

Sample Size: up to 200 µl of serum, plasma, body fluids and the surpernatant of viral infected cell culture
Operation: centrifuge/ vacuum manifold
Elution Volume: 50~75 µl
Handling Time: 40 minutes
Expected Yield: 90 % recovery

Important Note

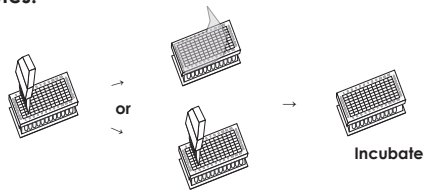
1. Make sure everything is RNase-free when handling this Kit
2. Buffer provided in this kit contain irritants. Wear gloves and lab coat when handling these buffers.
3. Add the indicated volume of ethanol (96-100%) to concentrated AD Buffer, Wash1 Buffer and Wash2 Buffer when first use.

Centrifuge Protocol

Please Read Important Notes Before Starting The Following Steps.

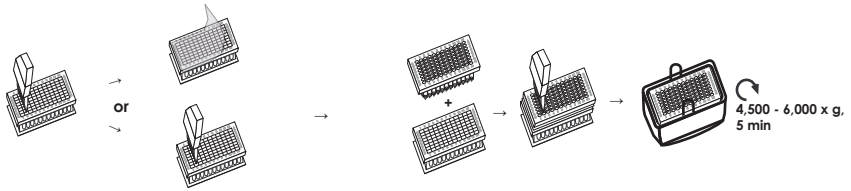
Step1: lysis

- Transfer 200 µl of sample to each well of the 96-Well 2 ml plate. If prepared sample is less than 200 µl, adjust sample volume to 200 µl with PBS (not provided)
- Add 400 µl of VNE Buffer to each well of the 96-Well 2 ml plate.
- Seal the plate with Adhesive Film and mix by vortex or pipetting. And Incubate at room temperature for 10 minutes.



Step 2: Binding

- Add 300 µl of AD Buffer (ethanol added) to each well of the 96-Well 2 ml plate. Mix the sample completely by shaking (seal with adhesive film) or pipetting.
- Place a 96-Well Viral DNA/ RNA Binding Plate on top of another 96-Well 2 ml plate (not provided).
- Place the assembly plates in a rotor bucket and centrifuge at 4,500-6,000 x g for 5 min.
- Discard the flow-through and return the 96-Well Viral DNA/ RNA Binding Plate to the 96-Well 2 ml Plate.

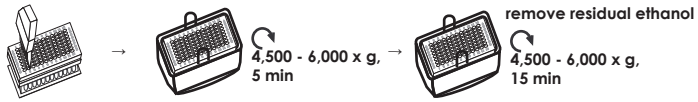


STEP 3: First washing

- Add 350 µl of Wash 1 Buffer (ethanol added) to each well of the 96-Well Viral DNA/ RNA Binding Plate.
- Place the assembly plates in a rotor bucket and centrifuge at 4,500 – 6,000 x g for 5 min.
- Discard the flow-through and return the 96-Well Viral DNA/ RNA Binding Plate back to the 96-Well 2 ml Plate.

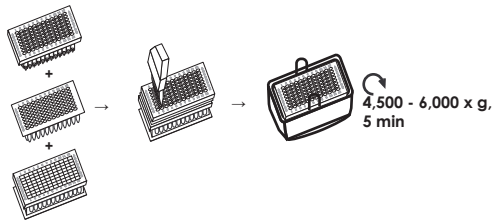
STEP 4: Second washing

- Add 600 µl of Wash 2 Buffer (ethanol added) to each well of the 96-Well Viral DNA/ RNA Binding Plate.
- Place the assembly plates in a rotor bucket and centrifuge at 4,500 – 6,000 x g for 5 min.
- Discard the flow-through and return 96-Well Viral DNA/ RNA Binding Plate back to the 96-Well 2 ml Plate.
- Place the assembly plates in a rotor bucket and centrifuge at 4,500 – 6,000 xg for an additional 15 minutes to remove residual ethanol.



STEP 5: DNA/RNA Elution

- Place a clean 96-well PCR Plate (provided) on top of a clean 96-Well 2 ml Plate (not provided). And place the 96-Well Viral DNA/ RNA Binding Plate on top of the clean 96-Well PCR plate. (top: 96-Well Viral DNA/ RNA Binding Plate, middle: 96-well PCR Plate, bottom: 96-Well 2 ml plate)
- Add 50 ~ 75 µl of RNase-free water on the membrane center of the 96-Well Viral DNA/ RNA Binding Plate. Stand for 3 minutes until RNase-free water has been absorbed by the membrane completely.
- Place the combined plates in a rotor bucket and centrifuge for 5 min at 4,500 – 6,000 x g for 5 min to elute purified DNA.

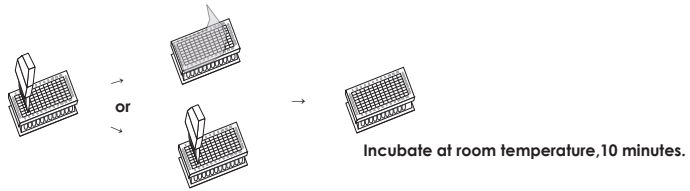


Vacuum/ Centrifuge Protocol

Please Read Important Notes Before Starting The Following Steps.

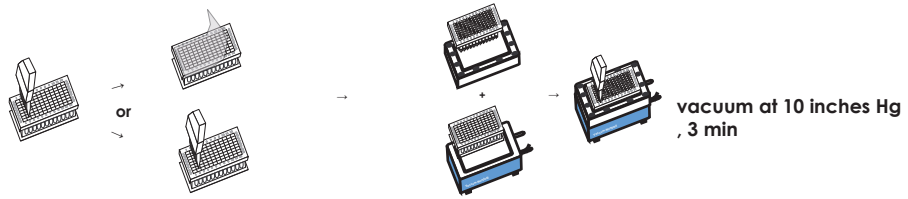
Step1: lysis

- Transfer 200 µl of sample to each well of the 96-Well 2 ml plate. If prepared sample is less than 200 µl, adjust sample volume to 200 µl with PBS (not provided)
- Add 400 µl of VNE Buffer to each well of the 96-Well 2 ml plate.
- Seal the plate with Adhesive Film and mix by vortex or pipetting. And Incubate at room temperature for 10 minutes.



Step 2: DNA Binding

- Add 300 µl of AD Buffer (ethanol added) to each well of the 96-Well 2 ml plate. Mix the sample completely by shaking (seal with adhesive film) or pipetting.
- Place a 96-Well Viral DNA/ RNA Binding Plate on top of another 96-Well 2 ml plate (not provided).
- Transfer the sample mixture from step 1 to each well of the 96-Well Viral DNA/ RNA Binding Plate.
- Apply vacuum at 10 inches Hg for 3 minutes until wells have emptied.



Step 3: First washing

- Add 350 µl of Wash 1 Buffer (ethanol added) to each well of the 96-Well Viral DNA/ RNA Binding Plate.
- Apply vacuum at 10 inches Hg for 5 minutes until wells have emptied.