NAUTIAGENE

Product Information

NautiaZ Viral Nucleic Acid Extraction Kit

(100/300 prep)

Cat.No. : NGVN-S100/NGVN-S300
Sample : 200 µl Sample
Yield : Up to 20 µg

NGVN-S100	NautiaZ Viral Nucleic Acid Extraction Kit (100 prep)
NGVN-S300	NautiaZ Viral Nucleic Acid Extraction Kit (300 prep)

Contents

	NGVN-S100T	NGVN-S100	NGVN-S300
VN1 Buffer	1.5 ml	45 ml	125 ml
VN2 Buffer*	220 ul	6 ml	16 ml
W1 Buffer	2 ml	45 ml	125 ml
W2 Buffer**	300 ul x2	15 ml	25 ml x2
RNase-free Water	1 ml	10 ml	30 ml
VZ Column	4 pcs	100 pcs	300 pcs
Collection Tube	4 pcs	100 pcs	300 pcs
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*Add 1650 ul / 45 ml / 120 ml ethanol (96-100%) to VN2 Buffer prior to the initial use
**Add 1.2 ml x2 / 60 ml / 100 ml x2 ethanol (96-100%) to W2 Buffer prior to the initial use

Buffer Preparation

- Add ethanol (96-100%) to the Wash Solution prior to first use:

	NGVN-S100T	NGVN-S100	NGVN-S300
VN2 Buffer ethanol (96 ~ 100%)	220 ul 1650 ul	6 ml 45 ml	16 ml 120 ml
W2 Buffer ethanol (96 ~ 100%)	300 ul x2 1.2 ml x2	15 ml 60 ml	25 ml x2 100 ml x2

Additional Requirements

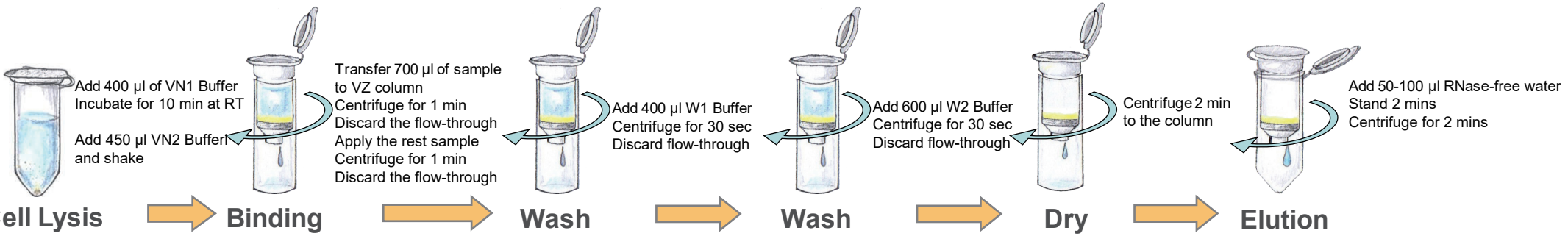
1. PBS
2. DNase/RNase-free microcentrifuge tubes
3. Ethanol

Important Notes

1. Use sterile, RNase-free pipet tips and microcentrifuge tube.
   *Wear a lab coat and disposable gloves to prevent RNase contamination.
2. Make sure the starting sample amount is under the limit.
3. Add ethanol (96-100%) to Wash Buffer prior to the initial use

Description

NautiaZ Viral Nucleic Acid Extraction Kit is special designed for purification of viral DNA or RNA from cell-free samples such as serum, plasma, body fluids and the supernatant of viral infected cell cultures. The method use detergents and a chaotropic salt to lyse virus, than nucleic acid in chaotropic salt is bonded to glass fiber matrix of column. After washing off the contaminants, the purified nucleic acid is eluted by RNase-free water. The entire procedure can be completed in 20 minutes and the purified nucleic acid is ready for RT-PCR and real-time PCR.



PURIFICATION PROTOCOLS

STEP	PROCEDURE
1 Sample prepare	**Transfer 200 ul sample** (serum, plasma, body fluids, and cell culture supernatant) into a microcentrifuge tube (If the sample is less than 200 µl, adjust the sample volumn to 200 µl with PBS).
2 Lysis	**Add 400 µl VN1 Buffer** to the sample , mix by vortexing and incubation at RT for 10 minutes. Pre-heat the Elution Buffer to 75°C for Elution Step.
	Add 450 µl VN2 Buffer (ethanol added) to the sample and shake vigorously.
3 Nucleic Acid Binding	Place a VS column in a 2 ml Collection tube. **Apply 700 µl of lysate mixture** from previous step to the **VZ column**. Centrifuge at full speed (16,000 x g) for 1 minute, and discard the flow-through.
	Apply the rest of sample mixture to the same Column. Centrifuge at full speed (16,000 x g) for 1 minute. Discard the flow-through and place the VS Column back in the Collection Tube.
4-1 Wash	**Apply 400 µl W1 Buffer** into the VZ column. Centrifuge at full speed (16,000 x g) for 30 seconds. Discard the flow-through and place the VZ Column back in the Collection Tube.
4-2 Wash	**Apply 600 µl W2 Buffer (ethanol added)** into the VZ column. Centrifuge at full speed (16,000 x g) for 30 seconds. Discard the flow-through and place the VZ Column back in the Collection Tube.
5 Dry column	Centrifuge at full speed (16,000 x g) for 2 minutes to dry the column matrix.
6 Elution	Place dried VZ column in a clean microcentrifuge tube (DNase/RNase-free, not provided). **Apply 50-100 µl of Pre-Heated RNase-free water** into the center of the Column matrix. Note： For effective elution, make sure that RNase-free Water is dispensed on the membrane center and is absorbed completely.
	Stand for 2 minutes until water absorbed by the matrix. Centrifuge at full speed (16,000 x g) for 2 minute to elute purified nucleic acid.
7 Pure Nucleic Acid	Store nucleic acid at -80°C.