

Magnetic Beads Virus DNA/RNA Extraction Plate Kit



96 Well Viral DNA/RNA Extraction Plates (MVP096)

- Sample** : up to 300 µl plasma, serum, body fluid, supernatant of viral infected cell cultures, nasopharyngeal and oropharyngeal swabs in VTM
- Format** : 96 well extraction plates
- Sensitivity** : as low as 10E1 copy number of virus
- Equipment** : **TANBead Maelstrom 9600**
- Operation time** : 60 minutes/ 96 tests
- Elution volume** : 80 µl



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Introduction

Geneaid Magnetic Beads Virus DNA/RNA Extraction Plate Kit (MVP) was designed for high-throughput purification of high-quality of viral DNA and viral RNA from cell-free samples such as serum, plasma, body fluids, the supernatant of viral infected cell cultures, nasopharyngeal and oropharyngeal swabs in viral transport medium (VTM). Viral DNA/RNA is bound to the surface of the magnetic beads and released using a proprietary buffer system. The Magnetic Beads Viral DNA/RNA Extraction Plate Kit is compatible with TANBead Maelstrom 9600 Extraction System and other similar extractors. The purified viral DNA/ RNA can be used directly in qPCR and qRT-PCR assays.

Quality Control

The quality of Magnetic Beads Virus DNA/RNA Extraction Plate Kit is tested on a lot-to-lot basis according to Geneaid's ISO-certified quality management system by isolating viral DNA/RNA from a 200 µl plasma sample.

Kit Contents

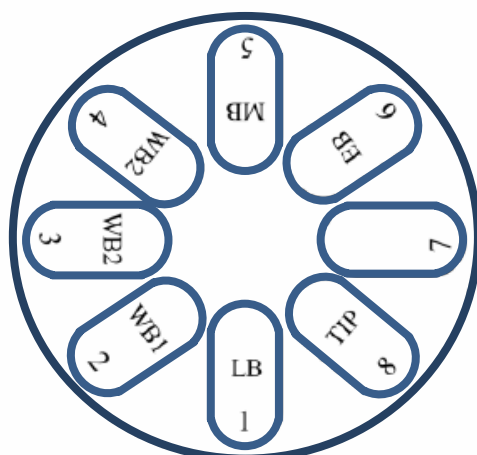
Component	MVP096	Description
Extraction Plate	6	96 well plate with reagent buffers
Spin Tips	96	Spin Tips Assembled Box
Protocol	1	Instruction guide for user

Storage conditions

Components under room temperature (15~35°C) can be stored until the expiration date labeled on the box.

Extraction Plate Contents

Plate	Buffer	Volume
# 1	Lysis Buffer	600 µl
# 2	Wash Buffer 1	800 µl
# 3	Wash Buffer 2	800 µl
# 4	Wash Buffer 2	800 µl
# 5	Magnetic Beads	800 µl
# 6	Elution Buffer	80 µl



Important before use

1. Inspect the completeness of the Extraction Plates.
2. Do not shake the Extraction Plates vigorously to avoid the excess foam formation.
3. Remove the aluminum foil carefully to avoid splashing of the reagent solution.
4. After removing the aluminum foil, do not expose plates to air for a long time to avoid evaporation and changing pH then affecting purification efficiency.
5. Buffers contain chaotropic salt. During operation, always wear a lab coat, disposable gloves, protective goggles and (anti-fog) procedure mask. Guanidine salts can form highly reactive compounds when combined with bleach. **DO NOT** add bleach directly to the sample-preparation waste.

Magnetic Beads Virus DNA/RNA Extraction Plate Kit Protocol

Automatic viral
DNA/RNA
extraction

- Carefully remove the aluminum foil from all Extraction Plates.
- Transfer **300 µl of plasma, serum or viral transport medium (VTM)** into wells of Plate 1 (Lysis Buffer Plate).

Note: The volume ratio of sample and lysis buffer is about 1:2. Adding 200-300 µl of sample is suggested. If the ratio is changed, it might be affected the performance.

- Select a program “**665**”. The parameters are given in the following section.
- Follow the guide shown on the screen and place plates carefully.

Note: Make sure that the missing corner of Extraction Plate faces toward the door panel.

- Carefully remove the Extraction Plates when the program is finished.
- Use micropipette to transfer the purified viral nucleic acid from plate 6 (Elution Buffer Plate) to a clean tube. The purified nucleic acid can be used for subsequent experiments such as real-time PCR immediately or store at -70°C for long time.
- The used Extraction Plates should be regarded as medical waste with risk of biological infection and properly disposed of in accordance with national regulations.

665 Program

Plate	1	2	3	4	5	6	7	8
Volume (µl)	900	800	800	800	800	150		
Keep Temp.	45	45	40	-	-	50		
Action	For.	For.	For.	For.	For.	For.		
Name	LB	WB1	WB2	WB2	MB	EB		Tip

Step	Plate	Temp.	Mixing (min)	Mixing (rpm)	Collect (sec)	Vapor (min)	Pause
1	5	0	0	3000	30	0	OFF
2	1	60	10	3000	30	0	OFF
3	2	50	1	3000	30	0	OFF
4	3	40	1	3000	30	0	OFF
5	4	0	1	3000	30	10	OFF
6	6	65	5	3000	30	0	OFF
7	5	0	0.1	3000	0	0	OFF

