Magnetic Beads Virus DNA/RNA Extraction Plate Kit Geneaid

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: Geneald SYNC Nucleic Acids Extraction System

Operation time : 30 minutes/ 32 tests

Elution volume : 80 µl



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Introduction

Geneaid Magnetic Beads Virus DNA/RNA Extraction Plate Kit 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 can be used for Geneaid SYNC Nucleic Acids 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

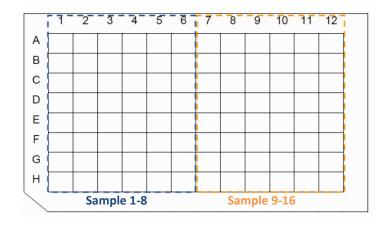
Component	MVP096	Description
Extraction Plate	6	96 well plate with reagent buffers
Strip	12	8-channel strip
Protocol	1	Instruction guide for user

Storage conditions

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

Extraction Plate Contents

Column	Buffer	Volume
# 1/7	Lysis Buffer	600 μΙ
# 2/8	Wash Buffer 1	800 μl
# 3/9	Wash Buffer 2	800 μΙ
# 4/10	Wash Buffer 3	800 μΙ
# 5/11	Magnetic Beads	800 μΙ
# 6/12	RNase-free Water	80 μΙ



Important before use

- 1. Inspect the completeness of the Extraction Plates and Strips.
- 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

- Carefully remove the aluminum foil from Extraction Plate.
- Transfer 300 μl of plasma, serum or viral transport medium (VTM) into column #1/#7 of Extraction Plate.

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

- Turn on the Geneald SYNC Nucleic Acids Extraction System.
- Place the Extraction Plates on the plate rack of the Geneald SYNC Nucleic Acids
 Extraction System and push the plate rack back into the extraction system.

Automatic viral DNA/RNA extraction

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

- Push strips completely to the bottom of strip rack frame.
- Close the door panel.
- Select the program "MVP096". Please see the program below.
- Once the program has ended, buzzer shall alarm. Take out Extraction Plate carefully.
- Transfer the purified nucleic acid from column #6/ #12 to clean tubes. 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 and Strips should be regarded as medical waste with risk of biological infection and properly disposed of in accordance with national regulations.

MVP096 Program

Run	Well No. (0-6)	Name	Standby (0-30Min)	Mix (1-30Min)	Volume (100-1000μl)	Mix Speed (1-3)	Mag (0-120Sec)	Temp. (40-80°C)	Pause
\checkmark	5	Bead Transfer	0	1	800	2	30	50	
V	1	Lysis	0	8	800	1	30	50	
V	2	Wash 1	0	1	800	2	30	50	
V	3	Wash 2	0	1	800	2	30	50	
V	4	Wash 3	0	1	800	2	30	50	
V	6	Elution	8	5	150	2	60	50	
\checkmark	3	End	0	1	800	2	0	0	