

**HELINI**



**MagPure**

**Viral Nucleic acid**

**Purification Kit**

[Plasma/Serum/CSF/VTM/Cell culture/Swabs  
pellets]

Cat. No: 2501 – 16 tests  
[Prefilled – 96 deep well plate]

Compatible with: HELINI MagPure 32 Automatic Purification system

## **Introduction**

The HELINI MagPure Nucleic acid purification Kit is designed for rapid automated purification of nucleic acid [DNA/RNA] from various samples, such as plasma, serum, saliva, urine, nasal swabs, buccal swabs and urogenital swabs using HELINI MagPure Instrument. The Nucleic acid purified using the HELINI MagPure Nucleic acid purification kit contains high quality and free of proteins, nucleases, and other contaminants or inhibitors. They are, therefore, suitable for direct use in many different downstream applications, such as qPCR (quantitative PCR), RT-qPCR (reverse transcription qPCR), and several other enzymatic reactions.

## **Intended Use**

The reagents and specific plastic consumables are designed for use with the HELINI MagPure 32 automatic purification system.

## **Principle and Procedure**

The HELINI MagPure Nucleic acid purification Kit uses magnetic-particle technology for Nucleic acid purification. The HELINI Biomolecules MagPure technology combines the speed and efficiency of nucleic acids purification with easy handling of magnetic particles. The purification process requires no phenol/chloroform extraction and needs very little hands-on time. The HELINI MagPure Magnetic Beads are highly reactive, super paramagnetic beads. The first step of the protocol lyses the sample, after which the nucleic acids can bind to the surface of the Magnetic Beads in the presence of ethanol. The following three effective wash steps dispose of proteins, cell debris, and any residual contaminants, while the nucleic acids bound to the MagPure Magnetic Beads are transferred through the wash steps. High-quality nucleic acids are eluted into the nuclease-free water, and are ready for subsequent downstream processes.

### Kit components

Components	Qty	Storage
Carrier RNA - 5µl/reaction	100µl	-20°C
Proteinase K - 20µl/reaction	350µl	-20°C
Magnetic beads	200µl	4°C
8 well Comb	2	RT
Prefilled – 96 well Deep well plate	1	RT
Instruction manual		

### Safety Information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. Discard sample and assay waste according to your local safety regulations.

### Technical Assistance

For technical assistance and more information, please contact;

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0091-44-24490433

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### Material Required

- Single or multichannel micro Pipettes Variable Volume 0.5-10µl, 10-100µl, and 100-1000µl
- Sterile pipette tips with aerosol barrier 2-20µl, 10-100µl, and 100-1000µl
- Disposable powder-free gloves
- 1.5ml/2ml centrifuge tubes
- 100% Ethanol

**Things to do before starting:**

Mix magnetic beads tube well, before pipetting, Add 12.5µl of Magnetic beads to each well in column 2 and column 8 of the plate.

**MagPure 96 well prefilled reagents order as follows;**

<b>Column-1</b>	<b>Lysis buffer</b>	<b>200µl</b>
Column-2	MagPure Beads	300µl
Column-3	Wash buffer-1	600µl
Column-4	Wash buffer-2	600µl
Column-5	Wash buffer-2	600µl
Column-6	Elution buffer	100µl
<b>Column-7</b>	<b>Lysis buffer</b>	<b>200µl</b>
Column-8	MagPure Beads	300µl
Column-9	Wash buffer-1	600µl
Column-10	Wash buffer-2	600µl
Column-11	Wash buffer-2	600µl
Column-12	Elution buffer	100µl

**Protocol:****Plasma/serum/CSF/Swab/Viral carrier media/Swabs:**

Transfer 200µl Plasma, Serum, CSF, Swab pellet suspended in 200µl water and viral carrier media directly into first [1<sup>st</sup>] and seventh [7<sup>th</sup>] column of the 96 well plates.

**Procedure**

1. Gently tap the Deep well 96 well plate in a flat surface in order to bring down solution sticking into the film while transportation. Label first [1<sup>st</sup>] and seventh [7<sup>th</sup>] columns using permanent marker as “S”. Label the 6<sup>th</sup> and 12<sup>th</sup> columns as “E”. [“S” = Samples. “E” = Elute]
2. Label the sample number in the left and right side of the plate. Carefully, transfer the samples into first and seventh column of the plate. Pipette mix 2 to 3 times while adding the sample.

S1						S9					
S2						S10					
S3						S11					
S4						S12					
S5						S13					
S6						S14					
S7						S15					
S8						S16					

S = Samples

3. Add 5µl of Carrier RNA and 5µl of internal control template into each sample wells in the first [1<sup>st</sup>] and seventh [7<sup>th</sup>] column. Pipette mix 2 to 3 times while adding.
4. Add 20µl of Proteinase K in to each sample. Pipette mix 2 to 3 times while adding.

5. Place the plate into HELINI MagPure 32 Automatic purification system deck carefully. Make sure that it fitted properly by pressing in the top.
6. Insert the 8 well combs in to respective magnetic arms.
7. Login using user name and pass word. Select “Program edit”. Select the file “HELINI Nucleic acid-A” and press enter.
8. Press Start button. Close the front panel door.
9. This program completes in 15min. Exactly after 15min, the machine will get pause and beep thrice.
10. Press Stop button and open the front door.
11. Carefully, take out the plate and add 250µl Ethanol [96-100% ethanol] to each wells in the first [1<sup>st</sup>] and seventh [7<sup>th</sup>] columns. Pipette mix while adding ethanol. Place back the plate into machine.
12. Select the file “HELINI-Nucleic acid-B” in the Program list and press Start button.

13. This program will be completed in 25min. Machine will beep after a successful completion. In the mean time, Label fresh sixteen 1.5ml centrifuge tube for transferring nucleic acid elute.
14. Open the front door. Carefully take out the plate and transfer the nucleic acid from the 6<sup>th</sup> and 12<sup>th</sup> column in to labelled 1.5ml centrifuge tubes.
15. Use immediately in qPCR applications or at Store -20°C.

In association with

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