HELINI
MagSpin
Viral RNA
Mini spin prep kit

Instructions for use

CE
IVD

REF 2550

100/250 Prep

HELINI Biomolecules, Chennai, INDIA

www.helini.in

Contents

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Intended Use

The HELINI MagSpin viral RNA mini spin prep kit is a magnetic bead based rapid and cost-effective small-scale preparation of high-quality Viral RNA from VTM. Purified viral RNA can be used directly in RT-PCR/PCR.

Kit components

Components	Volume Per reaction	100 tests	250 tests
MagSpin Beads	6µl	0.6ml	1.5ml
Lysis buffer	200µl	20ml	50ml
Elution Buffer	100µl	10ml	25ml

Storage

- The kit is shipped in room temperature.
- Upon arrival, Magnetic beads should be stored in 4°C
- Remaining consumables store at room temperature.
- They are stable until the expiration date stated on the label.
- Repeated thawing and freezing should be avoided, as this might affect the performance of the assay.

Material and instruments required

- Ethanol [96 – 100%]
- 70% ethanol
- Desktop centrifuge having 13000rpm or above with a rotor for 1.5/2 ml reaction tubes
- Water bath/Dry bath/Thermo mixer
- Vortex
- Incubator
- Micro Pipettes (variables)
- Micro Pipette tips with filters (disposable)
- Powder-free gloves (disposable)

[Please ensure that all instruments used have been installed, calibrated, checked and maintained according to the manufacturer´s instructions and recommendations.]

Product Use Limitations

- All reagents may exclusively be used in molecular biology DNA/RNA applications.
- The product is to be used by personnel specially instructed and trained in Molecular biology experiments.
- Strict compliance with the user manual is required for optimal PCR results.
- Attention should be paid to expiration dates printed on the box and labels of all components. Do not use expired components.
- Wear protective disposable powder-free gloves, a laboratory coat and eye protection when handling specimens and kit components.
- Avoid microbial and nuclease (DNase/RNase) contamination of the specimens and the components of the kit.
- Always use DNase/RNase-free disposable pipette tips with aerosol barriers.
- Use separated and segregated working areas for sample preparation, reaction setup and amplification/detection activities.
- The workflow in the laboratory should proceed in unidirectional manner. Always wear disposable gloves in each area and change them before entering a different area.
- Store positive and/or potentially positive material separated from all other components of the kit.
- Discard sample and assay waste according to your local safety regulations.

Technical Assistance

For technical assistance and more information, please contact;

0091-9382810333
0091-44-244490433
helinibiomolecules@gmail.com

Wash buffers - Preparation

Add the indicated volume of ethanol (96-100%) and water to prepare wash buffer.

Wash Buffer – 70% Ethanol		
	100 prep	**250prep**
Sterile distilled water	30ml	75ml
Ethanol [96 – 100%] to add	70ml	175ml
Total volume	**100ml**	**250ml**

Important Notes:
All purification steps should be carried out at room temperature.

All centrifugations should be carried out in a table-top micro-centrifuge at 8000 to 10000rpm.

Adjustment of sample volume:
If your sample volume is less than 200µl, the sample volume should be adjusted with PBS/TE buffer.

If sample volume to be used more, Scale up buffers volume accordingly.

Procedure:

Pre requirement:

- Set Water bath/Dry bath/Thermo mixer/Incubator to 56ºC
- Tissue Paper towels
- Vortex mixer

1. Transfer 200µl of Lysis buffer into sterile 1.5ml centrifuge tube.

2. Add 200µl of test sample-VTM [Option: If you are using Internal control template to monitor extraction efficiency, please add manufacturer indicated volume of Internal control template]

3. Mix well by pulse vortex for 15 seconds. Centrifuge few seconds to bring down drops to the bottom of the tube.

4. Incubate in room temperature for 10min.

5. Add 200µl of 100% Ethanol [100%] and mix well by vortex or invert mixing for 10seconds.

6. Mix well the MagSpin beads vial by inverting several times and make sure the beads are thoroughly mixed well. Beads tends to settle faster. Intermediate mixing will be required for uniform suspension.

7. Add 6µl of MagSpin beads and mix well by vortex or invert mixing for 10seconds.

8. Incubate in room temperature for 5min.

9. Centrifuge at 8000rpm for 15sec. Decant/discard the flow-through completely. [If 15sec option is NOT available, proceed with 1min duration]

10. Add 750µl of Wash buffer [70% ethanol – prepared]. Dislodge the pellet by brief vortex or using same pipette tip, gently pipette mix 10 times to dislodge the beads and mix thoroughly.

11. Incubate for 1min at room temperature.

12. Centrifuge at 8000rpm for 15sec and discard/Decant the wash buffer completely. [If 15sec option is NOT available, proceed with 1min duration]

13. Add 750µl of Wash buffer [70% ethanol – prepared] and Dislodge the pellet by brief vortex or using same pipette tip, gently pipette mix 10 times to dislodge the beads and mix thoroughly.

14. Incubate for 1min at room temperature.

15. Centrifuge at 8000rpm for 15sec and discard/Decant the wash buffer completely. Gently tap in paper towel to remove the wash buffer drops completely. [Important – Do not tap very hard, as it may cause the beads pellet to slip.]

16. Incubate the tube cap opened in room temperature for 5 to 10min. Incubator or Dry bath or Thermo mixer also can be used for effective drying. Set temperature 56ºC and incubate for 5min. [This is important step allowing residual ethanol to evaporate]

17. Add 100µl of Elution buffer and gently vortex or tap mix thoroughly.

18. Incubate at 56ºC for 5 minutes. [Water bath/Dry bath/Thermomixer/Incubator]

19. Centrifuge at 10000rpm for 2 min and without disturbing the beads, transfer 70µl of eluted RNA into fresh 1.5ml centrifuge tube. Either use directly in PCR or store at -20°C for later analysis. [Note: There may be a black precipitate in the side of the tube, it is normal and it will not affect the performance of the assay]

Recommendation for Real-time PCR:

Use 5 - 20µl of elute

Note: Purified RNA is **NOT** suitable for bottom tube reading Real-time PCR machines [Example; Rotor gene Real-time PCR machine]

Quality Control

In accordance with the HELINI Biomolecules in house Quality Management System, each lot of HELINI MagSpin viral RNA mini spin prep kit is tested against predetermined specifications to ensure consistent product quality.

Explanations of symbols

In vitro diagnostic medical device

Catalogue number

Pack size – number of tests

Manufacturer

Manufactured by

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