MagaBio plus Virus RNA Purification Kit II

BIOER

【**Product Name**】**MagaBio plus Virus RNA Purification Kit II**

【**Packing Size**】32 Tests/box; 50 Tests/box; 100 Tests/box

【**Usage**】

Used for nucleic acid extraction, enrichment, purification and other steps. The isolated product is used for clinical in vitro testing.
For professional use only.

【**Principle and Advantage**】

Nucleic acid in serum, plasma, swabs and other samples is released by using Lysis Buffer. Released virus RNA is bound exclusively and specifically to the Magnetic beads. The virus RNA bound to magnetic particles is captured by magnetic material; contaminants are removed by washing with Wash Buffer. The nucleic acid is then eluted from the particles with an Elution Buffer.

【**Kit Components**】

Cat#	**BSC87S1E**	**BSC87S1B**	**BSC87M1B**	**Components**
Components Name	**32 T**	**50 T**	**100 T**	
Lysis Buffer	96 well pre- loaded plates 2 pieces	25 mL	50 mL	Surfactant and Tris buffer
Wash Buffer I		※15 mL	※30 mL	High-salt solution
Wash Buffer II		※6 mL	※12 mL	Low-salt solution
Elution Buffer		10 mL	20 mL	DNase/RNase free H_2O
MagaBio Reagent		1.25 mL	1.25 mL×2	Magnetic particles coated with silicon
Handbook	1	1	1	/

Notes：Buy BSC86S1B，add 15mL Absolute ethanol to ※15mL Wash Buffer I before use; add 24mL Absolute ethanol to ※6mL Wash buffer II before use；

Buy BSC86M1B，add 30mL Absolute ethanol to ※30mL Wash Buffer I before use; add 48mL Absolute ethanol to ※12mL Wash buffer II before use.

【**Reagents to be prepared by the user**】

Buy BSC87S1B and BSC87M1B, please prepare the absolute ethanol (analytical grade) by yourself.

【**Storage and transportation**】

1) The kit can be transported at room temperature（2～25℃）.
2) The kit should be stored at room temperature（2～25℃）.
3) All reagents are valid for 12 months if stored properly.

【**Applicable instrument**】

1．Magnetic rack or Bioer NPA-32P nucleic acid purification instrument;
2．Water bath or dry bath;
3．Vortex mixer.

【**Sample Requirements**】

If the sample volume is less than 300μL, you can add an appropriate volume of PBS buffer or Normal saline to make the total volume reach 300μL.

【Procedure】

Buy BSC87S1B and BSC87M1B; please follow the manual extraction method below.

A. Sample preparation

1. Processing methods of different samples:

（1）Serum, Plasma, other liquid samples virus: Add 300μL sample to a 1.5mL nuclease-free centrifuge tube.

（2）Swabs: Put the swab into tube with sample preservitive fluid after sampling, vortex vigorously for 1 min, and take 300 μL of soaking solution into a 1.5mL nuclease-free centrifuge tube for use.

2. Add 500μL Lysis Buffer, invert and mix well.

B. Sample Extraction

1. Add 25μL magnetic beads to the centrifuge tube (the magnetic beads should be mixed thoroughly before use), and mix upside down at room temperature for 3 minutes.
2. Place the centrifuge tube on the magnetic rack for 1 minute to allow the magnetic beads in the tube to be adsorbed, use a pipette to remove the liquid in the tube, and remove the centrifuge tube.
3. Add 500 μL of Wash Buffer I to resuspend the magnetic beads, place the centrifuge tube on the magnetic rack for 1 minute, and use a pipette to remove the liquid in the tube, and remove the centrifuge tube.
4. Add 500μL of Wash Buffer II to resuspend the magnetic beads. Place the centrifuge tube on the magnetic stand for 1 minute. Use a pipette to remove the liquid in the tube, allow the magnetic beads to continue to be adsorbed and dry at room temperature for 2 minutes.
5. Remove the centrifuge tube from the magnetic rack, add 70μL of Elution Buffer to resuspend the magnetic beads, and incubate in water bath at 70℃ for 3 minutes. In the meantime, invert it twice to fully elute the nucleic acid.
6. Place the centrifuge tube on the magnetic rack for 1 minute to adsorb the magnetic beads, and transfer the liquid to a new 1.5 mL nuclease-free centrifuge tube.

Note: If liquid is adhered on the tube wall and tube cover during operation, please centrifuge briefly to gather all liquid into the bottom of the tube, and then place it on the magnetic rack.

If you want to use with automated instruments, the lysis temperature and elution temperature of the deep-well plate need to be adjusted and optimized.

【Explanation of test results】

This kit is suitable for the extraction of viral nucleic acid in swabs, tissue, feces, blood, serum, plasma and other body fluid samples.

【Limitations of the test method】

Sample size: The sample size should be less than 300μL;

Sensitivity: It requires high-sensitivity PCR detection reagents.

【Performance Indicators】

The extracted product is detected by high-sensitivity HCV RNA detection reagent to reach a sensitivity of 50 IU/mL. The quality control products calibrated by the national standard products are repeatedly tested and statistically determined.

【Notes】

1. The following procedure is suitable for the use of Bioer NPA-32P nucleic acid purification instrument. If

other nucleic acid purification systems are used, the operating procedures need to be adjusted according to the performance of different instruments.

2. If the room temperature is too low, you need to preheat the bottled lysis buffer in a 56℃ water bath for 10 minutes to confirm that there is no crystal precipitation before use.
3. After receiving the kit, it should be stored at room temperature（2～25℃）.

Appendix：The automation purification, take Bioer NPA-32P as an example

1. Reagent Preparation

a. For BSC87S1B and BSC87M1B

Add 500μL Lysis Buffer to the column 1 and 7 of the 2.2mL 96-deep-well plate, 500μL Wash Buffer I to the column 2 and 8, 500μL Wash Buffer II to the column 3 and 9, 70μL Elution Buffer to the column 5 and 11, 175μL pure water and 25μL MagaBio Reagent to the column 6 and 12 (the magnetic beads should be mixed thoroughly before use).

b. For BSC87S1E

Put the 96 well pre-loaded reagents at room temperature. Invert 96-well plate upside down for three times, and tear off the plastic bag. Centrifuge the pre-loaded reagent for a few seconds (or swing by hand a few times) to avoid reagent adhering to the wall of the tubes. Tear off the aluminum foil film of 96-well plate and identify the direction of the plate (magnetic beads in column #6 & #12).

2. Add 300μL sample to the 96 well plate Lysis Buffer strip (column #1 & #7), please avoid cross-contamination.
3. Place 96 deep well plate to the instrument, install the 8-strip tips on the instrument.
4. Run the program according to the following procedures:

Step	Well	Name	Waiting Time (min: ss)	Mixing Time (min: ss)	Magnet Time (min: ss)	Adsorption	Speed	Volume (μL)
1	6	Beads	00 : 00	00 : 0	00 : 15	Normal	M	200
2	1	Binding	00 : 00	03 : 00	00 : 35	Strong	F	700
3	2	Wash 1	00 : 00	00 : 30	00 : 20	Strong	F	500
4	3	Wash 2	00 : 00	00 : 30	00 : 20	Strong	F	500
5	5	Elution	01 : 00	02 : 00	00 : 25	Strong	F	70
6	6	Discard	00 : 00	00 : 00	00 : 00	Normal	M	200

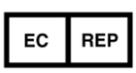
Temperature settings:

Elution temperature: 80℃. Elution starts heating at Step 5.

5. After the automatic purification is over, transfer the Elution Buffer in columns 5 and 11 to a clean nuclease-free 0.5mL centrifuge tube; if not using it immediately, please store at -20 degrees.

【Symbol Description】

CE	**CE MARK**	REF	**CATALOGUE NUMBER**
IVD	**IN VITRO DIAGNOSTIC MEDICAL DEVICE**	LOT	**BATCH CODE**

	**CAUTION**		**MANUFACTURER**
	**CONSULT INSTRUCTIONS FOR USE**		**DATEOF MANUFACTURE**
	**TEMPERATURELIMITATION**		**USE BY DATE**
	**AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY**		**DO NOT REUSE**