

SOP for Allsheng Auto-Pure 32A and 96 Nucleic Acid Purification System Ver: 2204

# **Express MgPure Viral RNA Purification Kit (Beads)**

(BW-MR6532-A32 and A96)





For In VitDiagnostic Use Only



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# **European Authorized Representative**



Company: SUNGO Europe B.V.

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**BEIWO** Express MgPure Viral RNA Purification Kit is designed for the extraction and purification of viral RNA (e.g. SARS-Cov-2, influenza virus, HIV, etc.) from serum, plasma, virus culture, swab sample, cerebrospinal fluid, bronchoalveolar lavage fluid and so on. MR6532-A32 is compatible with BEIWO BW Express 16, Allsheng Auto-Pure 32A; MR6532-A96 is compatible with Allsheng Auto-Pure 96, Hamilton, Beckman Biomek, Tecan, Thermo KingFisher and other similar nucleic acid purification systems.

#### KIT CONTENTS

#### (1) **BW-MR6532-A32**

Catalog#	Well position	BW-MR6532- A32-10	BW-MR6532- A32-11	BW-MR6532- A32-12
Preps	-	1 x 32	10 x 32	20 x 32
Lysis Buffer A	Column 1/7	600 μL	600 μL	600 μL
RNA Wash Buffer	Column 4/10	600 μL	600 μL	600 μL
MgPure Beads	Column 5/11	400 μL	400 μL	400 μL
DEPC-Treated ddH <sub>2</sub> O	Column 6/12	80 μL	80 μL	80 μL
8-strip Tip Comb	-	4	40	80

### (2) BW-MR6532-A96

Catalog#	Plate	BW-MR6532-	BW-MR6532-	BW-MR6532-		
Catalog#	position	A96-10	A96-11	A96-12		



Preps	-	1 x 96	4 x 96	10 x 96
Lysis Buffer A	2	600 μL	600 μL	600 μL
RNA Wash Buffer	4	600 μL	600 μL	600 μL
MgPure Beads	5	400 μL	400 μL	400 μL
DEPC-Treated ddH <sub>2</sub> O	8	80 μL	80 μL	80 μL
96-Well Tip Comb	-	1	4	10

#### **STORAGE**

The kit should be stored dry and at room temperature (15~25°C). They can be stored for at least 12 months without showing any significant reduction in performance, capacity, or quality of separation.

#### **EXPECTED USAGE**

For nucleic acid extraction, enrichment, purification and other steps. The processed product is used for clinical in vitro detection.

#### BEFORE STARTING

- ☑ Operate in an environment with the appropriate biosafety laboratory level (e.g BSL-2 or higher level) and wear appropriate personal protective equipment (e.g. gowns, gloves, goggles) when working with clinical specimens.
- ☑ Lysis Buffer A contains chaotropic salts, which may form reactive compounds when combines with bleach. Do not add bleach or acidic solutions directly to the preparation waste.
- ☑ Buffer may form precipitates upon storage, dissolve precipitates at 37°C before use.
- ☑ Ultraviolet disinfection of the Purification Instrument prior to use is recommended.
- ✓ Materials not supplied: 1.5 mL RNase-free centrifuge tube.

#### SAFETY INFORMATION

- When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets.
- ☑ The product should be used in strict accordance with the instructions. If it is not used in accordance with the regulations, it may cause pollution to the environment.
- ☑ Products are disposable, do not reuse, and the used product should be placed in the designated position in time.
- Exceeding the expiration date of this product, the performance of the product may be reduced, so it should be used within the expiration date.



This kit can only be used for in vitro experiments, and not for clinical, therapeutic and in vivo experiments in animals. If it is not used in accordance with the regulations, the company will not be responsible for the consequences arising therefrom.

## PROCEDURE (BW-MR6532-A32)

- 1. Take out a pre-loaded 96-well plate and gently shake it (if necessary), let the reagent or magnetic beads assemble at the bottom of the plate. **NOTE:** If there is any precipitation in **Column 1/7**, incubate the plate at 37°C to dissolve the precipitation before use.
- 2. In a biosafety cabinet, carefully remove the sealing foil of the 96-well plate. Aspirate 200 μL samples (serum, plasma, swab sample, etc.) into the deep wells in Column 1/7.
- **3.** Put the plate in a BEIWO BW Express 16 or an Allsheng Auto-Pure 32A Nucleic Acid Purification System.
- 4. Install two 8-strip Tip Combs for each plate.
- **5.** Run the program described in **Table 1**.
- 6. After the program is completed, take out the 96-well plate and aspirate the viral RNA solutions from Column 6/12 into new sterile tubes. The viral RNA solutions are ready to be used or can be stored at -20°C or -80°C.

Table 1. Recommended program for Auto-Pure 32A Nucleic Acid Purification System

Step	Well	Name	Mix time (min)	Magnet (sec)	Wait time (min)	Vol. (μL)	Mix speed (1-10)		Mix pos (0-100%)		pos	Magnet speed (1-10)
1	5	Beads	1	20	0	400	10	OFF	0	80	0	1
2	1	Bind	6	40	0	800	10	90	0	80	0	1
3	4	Wash	1	20	1	600	10	OFF	0	80	0	1
4	6	Elute	3	20	0	80	10	80	0	80	0	1
5	4	Drop	0.2	0	0	600	5	OFF	0	80	0	1

Note: Set 'Heating synchronization', 'Cool Fan Disabled', 'Cooling synchronization', and 'Drying Fan Disabled'

### PROCEDURE (BW-MR6532-A96)

- 1. Take out the 96-well plates required for single batch viral RNA extraction. Gently shake the plates if necessary to let the reagent or magnetic beads assemble at the bottom of the plates. If there is any precipitation in Lysis Buffer A, incubate the plate at 37°C to dissolve the precipitation before use.
- 2. In a biosafety cabinet, carefully remove the sealing foil of the 96-well plate named



Lysis Buffer A, aspirate  $200 \mu L$  clinical samples (serum, plasma, swab sample, etc.) into the deep wells. Put the plate on **position 2** of the Allsheng Auto-Pure 96 instrument.

- **3.** Carefully remove the sealing foil of the 96-well plate named **RNA Wash Buffer**, put it on **position 4** of the Auto-Pure 96 instrument.
- **4.** Carefully remove the sealing foil of the 96-well plate named **MgPure Beads**, put a **96-Well Tip Comb** into the plate, and put them on **position 5** of the Auto-Pure 96 instrument together.
- 5. Carefully remove the sealing foil of the 96-well plate named **DEPC-Treated ddH<sub>2</sub>O**, put it on **position 8** of the Auto-Pure 96 instrument.
- **6.** Run the program described in **Table 2**.
- After the program is completed, take out the DEPC-Treated ddH<sub>2</sub>O plate on position
  aspirate the Viral RNA solutions into new RNase-free tubes.
- **8.** The Viral RNA is ready to be used or can be stored at -80°C.

Table 2. Recommended program for Auto-Pure 96 Nucleic Acid Purification System

Step	Name	Plate	Time	Amp	Wait Time (min)		Mix Speed (1-10)		Seg- ments (0-5)		2nd Seg. time (s)	3rd Seg. time (s)	4th Seg. time (s)	5th Seg. time (s)	times	speed		Anti- Splash (0-30s)
1	Load	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
2	Beads	5	0.3	80	0	400	4	OFF	1	10	-	-	-	-	1	1	0	0
3	Bind	2	6	80	0	800	5	90	2	15	20	-	-	-	1	1	0	0
4	Wash	4	1	80	1	600	7	OFF	1	20	-	-	-	-	1	1	0	0
5	Elute	8	3	80	0	80	4	80	1	20	-	-	-	-	1	1	0	0
6	Unload	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0

Note: Set 'Heating synchronization', 'Cool Fan Disabled', 'Cooling synchronization', and 'Drying Fan Disabled'

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# **Appendix**

# **Index of Symbols**

IVD	In vitro diagnostic medical device
LOT	Lot number
	Manufacturer
$\triangle$	Attention, see instruction for use
EC REP	Authorized representative in the European Community
~~ <u> </u>	Date of manufacture
	Use until year & month (Expiration date)
(€	CE mark

#### LIMITED USE AND WARRANTY

This product is warranted to perform as described in its labeling and in BEIWO's literature when used in accordance with instructions. No other warranties of any kind, express or implied, including, without limitation, implied warranties of merchantability or fitness for a particular purpose, are provided by BEIWO. BEIWO's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of BEIWO, to replace the products, BEIWO shall have no liability for any direct, indirect, consequential, or incidental damage arising out of the use, the results of use, or the inability to use it product. For technical support or learn more product information, please contact us at 400-115-2855 or visit our website at <a href="https://www.beiwobiomedical.com">www.beiwobiomedical.com</a>







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