

MgPure Viral RNA Purification Kit

Prefilled reagents for Allsheng Auto-Pure 96 MR6532.A96 V210318

Contents

Kit Contents	1
Introduction	1
Storage and Stability	1
Before Starting	2
Protocol	2
Limited Use and Warranty	3

Safety Information

Strictly follow CDC or Depart of Health guidance for handling infectious samples. Wear appropriate personal protective equipment (e.g. gowns, gloves, eye protection) when working with clinical specimens. Specimen processing should be performed in a certified biological safety cabinet accordingly following biosafety guidelines for the specific virus. Buffer MYE and Buffer RB contains chaotropic salts, which may form reactive compounds when combines with bleach. Do not add bleach or acidic solutions directly to the preparation waste, wear gloves and protective eyewear when handling.





Introduction

The prefilled format of Viral RNA extraction kit provides an easy and reliable method for simultaneously extracting total viral RNA from 96 samples in 25 minutes. The acceptable samples are nasopharyngeal or oropharyngeal aspirates or washes, nasopharyngeal or oropharyngeal swabs, broncheoalveolar lavage, tracheal aspirates, and sputum. This procedure has been tested for isolating nucleic acids from COVID-19, Hepatitis A, Hepatitis C and HIV. The isolated RNA can be used for PCR, qRT-PCR and other downstream applications. This protocol is validated on Allsheng auto pure 96 and KingFisher plex and can be adapted to major automation platforms such as Biomek FX, Biomek 3000, Hamilton Microlab STAR, Hamilton MagEx STARlet and many others.

Kit Contents

Catalog#	MR6532.A96-00	MR6532A96-01	MR6532.A96-01B	MR6532A96-02
Preps	1 x 96	4 x 96	10 x 96	20 x 96
L Solution	400 μL	1.6 mL	4 mL	8 mL
Proteinase K	1.1 mL	5 mL	11 mL	22 mL
MgPure Beads	96x200 μL	4x96x200 μL	10x96x200 μL	20x96x200 μL
Buffer MYE	96x250 μL	4x96x250 μL	10x96x250 μL	20x96x250 μL
Buffer RB	96x500 μL	4x96x500 μL	10x96x500 μL	20x96x500 μL
RNA Wash Buffer*	96x100 μL	4x96x100 μL	10x96x100 μL	20x96x100 μL
DEPC-Treated ddH ₂ O	96x50 μL	4x96x50 μL	10x96x50 μL	20x96x50 μL
Magnetic rod comb	1	4	10	20
User Manual	1	1	1	1

^{*}R NA Wash Buffer: Add 400 μL 100% ethanol to each well before use.

Storage and Stability

Store Mgpure beads plates at 4-8°C and all other components at room temperature (15-25°C). All kit components are guaranteed for 1 year from the date of purchasing.

For long term: store proteinase K and L solution at -20 $^{\circ}\text{C}.$

Before Starting

- 1. Allsheng Auto Pure 96: Turn on ultraviolet disinfection for 20 min before use.
- 2. Preparation of RNA Wash Buffer by adding 400 µL per well before use.
- 3. Preparation of Buffer MYE/L solution/Proteinase K/Isopropanol mix: Calculate the number of samples to be processed and make a master mix of 4 μ L L Solution, 10 μ L proteinase K and 450 μ L isopropanol. Add 464 μ L of the master mix to each well of Buffer MYE plate.
- 4. Add 250 μ L sample to each well of Buffer MYE/L solution/proteinase K/isopropanol mix. (Note: The final isopropanol concentration > 40%)

Operation protocol

1. Take pre-loaded 96-well plates and add samples and reagents to the plate according to table 1 below.

Note: The total volume of each well must not exceed 1000 µL, or it may overflow.

96-well Vol. Sample / reagent Plate description Note (μL) plate Sample 250 Add by user Buffer MYE 250 Added Ensure the total volume is Binding L Solution, $\leq 1000 \mu L$ Add by user proteinase K and 464 isopropanol MgPure Beads 10 Beads storage solution Added 190 (or ddH₂O) Wash 1 500 Added **Buffer RB** Add 400 µL 100% RNA Wash Wash 2 100 ethanol to each well by Buffer user Elution volume can be adjusted DEPC-Treated 70 Elution Added according to specific ddH_2O requirements

Table 1. 96-well plate setting

- 2. Start the instrument, place a new magnetic rod comb in the instrument, and put 96-well plates into the corresponding position in the instrument.
- 3. Use the installed program (table 2).
- 4. Collect products after the program is completed. Take out 96-well plate, and pipette the purified RNA in the Elution plate into a sterile 96 plate, proceed to PCR or store at -80°C.

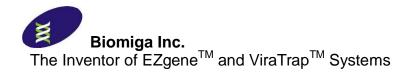


Table 2. Extraction procedure

Step	Name	Plate position	Mix time min	Mix range (%)	Wait time min	Vol (μL)	Mix speed 1-10	Tm (°C)	Magnetize section (0-5)	cycle index (1-10)	Magnetize speed (1-10)	First magnetize time (s)	Second magnetize time (s)
1	Load	2	-	-	-	-	-	-	-	-	-	-	-
2	Binding 1	2	10	80	0	900	2	OFF	0	1	-	-	-
3	Beads	3	1	80	0	100	1	OFF	2	1	1	5	5
4	Binding 2	2	5	80	0	900	8	OFF	2	2	1	10	10
5	Wash 1	4	1	80	0	600	8	OFF	2	1	1	10	10
6	Wash 2	5	1	80	2	600	8	OFF	2	1	1	5	5
7	Elution	6	5	80	0	100	5	OFF	1	3	1	30	-
8	Unload	4	-	-	-	-	-	-	-	-	-	-	-

Limited Use and Warranty

This product is warranted to perform as described in its labeling and in BIOMIGA'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 BIOMIGA. BIOMIGA's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of BIOMIGA, to replace the products, BIOMIGA 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 858-603-3219 or visit our website at www.biomiga.com