

Magnetic Swab Elution Viral Nucleic Acid Extraction Kit Instructions (Prefilled).

Composition

Magnetic Swab Elution Viral Nucleic Acid Extraction Kit	64 Preps
Cat. No.	4032064
Prefilled 96-well plates	4
8-well tip comb	8
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Storage

It can be stored up to 2 years at room temperature (0~30°C).

Technical Support

R&D Department, Hangzhou Simgen Biotechnology Co., Ltd. E-mail: technical@simgen.cn, Tel: 400-0099-857.

Introduction

This product is specially designed for magnetic bead-based nucleic acid extraction, and is suitable for rapid extraction of various viral RNA or viral DNA from 200 µl throat swab, nasal swab, genital tract swab, and anal swab elution. In the prefilled 96 deep-well plates, only the swab elution samples need to be added to the wells of columns 1 and 7, and a series of processes such as release, adsorption, washing and elution of viral nucleic acids can be automated by the instrument, and the final nucleic acids can be used immediately for PCR or RT-PCR reactions.

Equipment and Reagents to Be Supplied by User

1. Pipettes and tips (to avoid contamination between samples, use RNase-free/DNase-free pipette tips with filters).
2. Disposable gloves and protective equipment and tissues.
3. Viral Sample Preservation Solution (Simgen Cat. No. 4112100) may be required.
4. The Sim-300 Automatic Nucleic Acid Extractor or a similar instrument compatible with consumables.

Preparation Before Use

After swab sampling, place in normal saline solution (if it is an RNA virus sample, it is recommended to use Viral Sample Preservation Solution (Simgen Cat. No. 4112100) lysed sample) and vortex for 30 sec to fully lyse the sample.

Protocol

1. Add 200 μ l sample to each well of column 1 and column 7 of the 96 deep-well plate that has been pre-filled and place the 96 deep-well plate into the automated nucleic acid extractor.
2. Insert the 8-well tip comb in the automatic nucleic acid extractor.
3. Follow the steps below to set up the program in the automatic nucleic acid extractor:

Step	Hole	Amount of Fluid (μ L)	Soak (s)	Stirring intensity (level)	Stirring time (s)	Descending magnetism (s)	Bottom magnetism (s)	Magnetism times	Waiting time (s)	Stop Off/On 0/1	Plate1 lyse ($^{\circ}$ C)	Plate1 elute ($^{\circ}$ C)	Plate2 lyse ($^{\circ}$ C)	Plate2 elute ($^{\circ}$ C)
1	4	300	0	1	0	30	3	1	0	0	0	0	0	0
2	1	700	0	6	600	30	3	2	0	0	70	0	70	0
3	2	700	0	6	180	30	3	1	0	0	0	0	0	0
4	3	800	0	6	180	30	3	1	0	0	0	0	0	0
5	5	800	0	6	180	30	3	1	600	0	0	0	0	0
6	6	80	0	5	180	30	10	2	0	0	0	85	0	85
7	1	700	0	5	5	5	0	0	0	0	0	0	0	0

*The above procedure is based on the Simgen automatic nucleic acid extractor (Simgen Cat. No. Sim-300), if used with other instruments, please adjust the parameters of the program appropriately according to the characteristics of the instrument or call 400-0099-857 for technical support.

4. Transfer the viral nucleic acids from columns 6 and 12 to a clean centrifuge tube, or directly seal the 96 deep-well plate with parafilm and store at -20° C for later use.

* Since the beads take away some of the eluted nucleic acid solution, the viral nucleic acid solution that can be collected is about 50 μ l.