TGuide S96 Magnetic Viral DNA/RNA Kit

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TGuide S96 Magnetic Viral DNA/RNA Kit

Cat. no. GDP804

Kit Contents

Contents	GDP804 (96 preps)
Buffer RLCP	1 plate (96×300 µl/well)
Buffer PWCP	1 plate (96×500 µl/well)
MagAttract Suspension GSP2	1 plate (96×500 µl/well)
RNase-Free ddH_2O	1 plate (96×100 µl/well)
Proteinase K (10 mg/ml)	2 × 1 ml
KF 96-Tip Comb	1 set
Handbook	1

Storage Conditions:

This kit can be stored at room temperature (15-30°C) under dry condition for 12 months. If a precipitate has formed in Buffer, please place the buffer at 37°C for 10 min to dissolve the precipitate.

Introduction

The kit adopts magnetic beads with unique separation function and a unique buffer system to separate and purify high-quality virus DNA/RNA from serum, plasma, lymph, cell-free body fluid, cell culture supernatant, urine or various virus preservation solutions. The unique embedded magnetic beads have strong affinity for nucleic acid under certain conditions, and when the conditions change, the magnetic beads will release adsorbed nucleic acid, thus achieving the purpose of fast separation and purification of nucleic acid. The whole process is safe and convenient, and the extracted virus DNA/RNA has high yield, high purity and stable and reliable quality. The product is perfectly matched with TGuide S96 Automated Nucleic Acid Extractor. Magnetic beads are adsorbed, transferred and released by special magnetic rods, thus realizing the transfer of magnetic beads and nucleic acids with high automation degree.

The nucleic acid extracted and purified by using the kit can be suitable for various conventional operations, including various downstream experiments such as reverse transcription, PCR, fluorescence quantitative PCR, etc.

Features

- **Easy and fast:** Obtain high-quality viral DNA or RNA within 1 hour.
- **High throughput:** It can perfectly fit TGuide S96 Automated Nucleic Acid Extractor for high throughput extraction experiments.

Notes Please read these notes before using this kit.

1. Avoid repeated freezing and thawing of the sample, otherwise the extracted nucleic acid fragments will be smaller and the extraction yield will be reduced.
2. This kit is used for extracting of virus DNA/RNA, so special attention shall be paid to prevent nucleic acid degradation during operation. All utensils, sample dispensers, etc. used shall be dedicated, and disposable consumables such as centrifuge tubes and tips shall be sterilized by autoclaving. Operators shall wear powder-free gloves, masks, etc.
3. Please read the instructions carefully before use, operate in strict accordance with the instructions, and the clinical samples shall be

carried out in the Clean Bench or biosafety cabinet.

4. When it is used in combination with TGuide S96 Automated Nucleic Acid Extractor, first sterilize the instrument by ultraviolet. After the experiment, wipe the inside of the extractor with 75% ethanol and sterilize it with UV for 15 minutes.
5. Properly dispose the samples and reagent materials, thoroughly clean and disinfect the operation table.

Protocol

1. Preparation of prepacked deep-well plate

Take out the vacuum package prepacked 96-deep well plate from the kit, mix it upside down for several times to resuspend the magnetic beads, remove the vacuum package, gently fling all 96-deep well plates to concentrate the reagents and magnetic beads to the bottom of 96-deep well plate (or centrifuge at 500 rpm for 1 min with a plate centrifuge), carefully tear off the aluminum foil sealing film before use to avoid vibration of 96-deep well plate and prevent liquid from splashing.

2. Reagent and plate distribution

Plate position	E	F	G	H
Reagent	Blank	Blank	Blank	Blank
Plate position	**A**	**B**	**C**	**D**
Reagent	RLCP 300 µl	PWCP 500 µl	GSP2 500 µl	RNase-Free ddH_2O 100 µl

3. Operation steps of TGuide S96

3.1 Place the KF 96-Tip Comb in the MagAttract Suspension GSP2 plate.

3.2 Add 200 µl of treated sample (the sample needs to be equilibrated to room temperature) and 20 µl of Proteinase K to the 96-well plate of Buffer RLCP.

3.3 After the 96-well plate is correctly placed according to the plate position distribution, start the software NAPS of TGuide S96 and run the corresponding extraction program (see the following table for specific programs).

The TGuide S96 program is shown in the following table:

Step	Plate position setting	Mixing volume (μl)	Mixing speed	Mixing time (min)	Precipitation time (sec)	Adsorbing times	Adsorbing speed (mm/s)	Heating plate	Heating temperature (°c)	Pause time (min)	Capture action
Capture Tip Comb	C	—	—	—	—	—	—	—	—	—	Capture
Collect Beads	C	500	Medium	0.5	30	1	1.0	A	30	—	
Lysis Binding	A	520	Middle-slow	10	30	2	0.8	A	30	—	—
Wash-I	B	500	Middle-slow	3	30	1	1.0	—	—	—	—
Wash-II	C	500	Middle-slow	3	30	1	1.0	—	—	5	—
Elution	D	100	Medium	5	30	3	0.8	—	—	—	—
Finish	C	—	—	—	—	—	—	—	—	—	Release

3.4 After the program is completed, transfer DNA or RNA from the D position of the 96-deep well plate and store it at -20°C or -80°C.