TANBead® Nucleic Acid Extraction Kit



OptiPure Viral Auto Tube

(for use with the SLA-16/32 and SLA-E132 series)



665S46

(For Professional Use Only) V3

1. Intended use

TANBead® Nucleic Acid Extraction Kit (665S46) is suitable for isolating nucleic acid from various viruses. Automated nucleic acid extraction can be performed by using a magnetic bead-based technology of TANBead® Nucleic Acid Extractor. Purified nucleic acids can be analyzed by downstream applications including real-time PCR and next-generation sequencing.

2. Purpose

TANBead® Nucleic Acid Extraction Kit (665S46) is suitable for extracting nucleic acids of various viruses, such as the hepatitis C virus, hepatitis B virus, and influenza virus. Serum specimens are processed through a series of automatic extraction steps and finally the high-quality nucleic acids can be applied directly to the following qualitative and quantitative assays. With high sensitivity, this reagent kit can be applied for clinical diagnostics and research.

3. Principle

The silicon dioxide layer coated on the magnetic beads can absorb negative charged molecular in order to purify nucleic acid from samples.

Sample Types: 300 μl serum or PBS suspension Suitable Instrument: SLA-16/32, SLA-E132 series

4. Kit Components and Storage Conditions

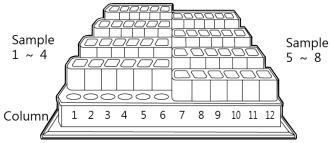
665\$46		∑∑ 96Assays
Auto Tube	96	6 well plate with reagent buffers
Base	2	A rack for 8 Auto Tubes
Elution Buffer	1.5 ml	Nuclease-Free Water
Proteinase K	1 ml	Proteinase K, store at 4°C
Strip	24	8-channel strip
Protocol	1	Instruction guide for user

Storage Conditions:

- 1. Components under room temperature (15 $^{\circ}$ 35 $^{\circ}$ C) can be stored until the expiration date labeled on the box.
- 2. The Proteinase K was transported at room temperature. When received, please store at 4° C.

Assembled Auto Tubes Content

Column	Buffer Solution	Volume
1/7	Lysis Buffer	600 μΙ
2/8	Washing Buffer 1	800 μΙ
3/9	Washing Buffer 2	800 μΙ
4/10	Washing Buffer 2	800 μΙ
5/11	Magnetic Beads	800 μΙ
6/12	Elution Buffer	80 ul



- 5. Precautions
- 1) It can only be used for in vitro diagnostic .
- 2) Avoid using expired reagents.
- 3) When the temperature is below 20°C, place the reagent plate in an oven (preheated 42 60°C) from 5 to 10 minutes.
- 4) Avoid vigorous shaking, to prevent excessive formation of foam
- Do not expose the opened reagent or plate to air. The evaporation would lead to pH change or effect on the extraction effectiveness.
- 6) The reagents are all colorless and transparent. Colored

- reagents indicate contamination, please replace it with a fresh plate before proceeding.
- Please check the integrity of the reagent plate, and remember to mount the spin tips into the appropriate position of the suitable instrument before operating them.
- 8) Please wear a mask and disposable gloves when handling.
- 9) Carefully remove aluminum foil to avoid splashing.
- 10) Use sterile consumables to avoid nuclease contamination.
- 11) Reagent solution contains guanidine salt, avoid using bleach containing detergent.
- 12) Avoid eyes, skin, and clothing contact with reagents. In case of any contact, flush with flowing water.
- 13) If any serious incident occurs, please report to the manufacturer and the competent authority of the member state in which the user and/or the patient is established.
- 6. Components supplied with kit

TANBead® Nucleic Acid Extraction Kit

- a. Auto Tubes
- b.Base
- c. Proteinase K
- d. Elution Buffer
- e.Strip

7. Materials and devices required but not provided

- TANBead® Nucleic Acid Extraction System Model: SLA-16/32, SLA-E132 series (non-sterile)
- 2) Disposable gloves
- 3) Scissors, utility knives
- 4) Micropipette, disposable tips (10 μ l / 200 μ l / 1000 μ l)
- 5) 1.5 ml microcentrifuge tube

8. Sample collection, transportation, storage, and pretreatment

- Sample collection and storage
- 1) Serum, whole blood
 - I. Serum specimens must be obtained from serum collection tubes, whole blood specimens must be obtained from sodium citrate or EDTA collection tubes.
 - II. Fresh whole blood specimens can be stored at room temperature for 6 hrs.
 - III. After centrifugation, the serum sample can be stored at
 - Room temperature for 24 hours
 - 2-8°C up to 7 days
 - -20°C long-term preservation
- Specimen transportation

Transportation of whole blood, serum specimens should be followed by specific pathogen transportation-related laws. The whole blood sample should be kept between 2-25°C during transportation and within 6 hours for separated serum. Serum samples can be transported between 2-8°C or by freezing.

9. Nucleic acid extraction protocol

Before operating, turn on the warm-up system of TANBead $^{\circ}$ Nucleic Acid Extractor, if it is equipped with temp. controller, please setting at 50 $^{\circ}$ C.

Prepare the Assembled Auto Tube s by inserting Auto Tube s into the Base completely.

- 1) Carefully remove the aluminum foil from Auto Plate.
- 2) Pipet 300 μl serum or PBS suspension and 10 μl Proteinase K into column #1/ #7 of Auto Plate.

Note: The volume ratio of mixture and lysis buffer is about 300 μ l: 600 μ l. If it is changed, it might be affected the performance.

- Push Assembled Auto Tube s completely to the bottom of plate rack. Make sure that the missing corner of Assembled Auto Tube faces toward the door panel.
- 4) Push strips completely to the bottom of strip rack frame.

- 5) Close the door panel.
- Select the program "VIRUS-40-5". The parameters are given in following section.
- 7) Once the program has ended, buzzer shall alarm. Take out Auto Plate carefully.
- 8) Use micropipette to transfer the purified nucleic acid from column #6/ #12 to a clean tube.
- 9) Put the used Auto Tube and strips into the waste recovery can.

10. Program

Prog	Program Name: VIRUS-40-5 Model: SLA-16/32, SLA-E132 series								
Step	Well	Temp (°C)	Mixing (M)	Collect (S)	Rod	Mixing Speed	Volume (μl)	Pause	Vapor (M)
1	5	50	0	60	ON	Medium	800	OFF	0
2	1	50	10	60	ON	Low	800	OFF	0
3	2	50	1	60	ON	Medium	800	OFF	0
4	3	50	1	60	ON	Medium	800	OFF	0
5	4	50	1	60	ON	Medium	800	OFF	10
6	6	50	5	60	ON	Medium	150	OFF	0
7	3	NA	1	0	OFF	Medium	800	OFF	0
8	0	NA	0	0	OFF	Medium	0	OFF	0

11. Explanation of Symbols

•••	Manufacturer	[]i	Consult instructions for use
15°C	Temperature limitation	Σ	Contains sufficient for <n> test</n>
\square	Use by date	IVD	For in vitro diagnostic use
REF	Catalog number	\triangle	Caution
LOT	Batch code	NON	Non-sterile
®	Do not use if package is damaged	※	Keep away from sunlight
7	Keep dry	(2)	Do not re-use

EC REP

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