

TANBead® RNA Extraction Kit REF 665A46 (for use with the SLA-16/32 and SLA-E132 Series)



1. Purpose

TANBead® RNA Extraction Kit (REF) 665A46) is suitable for extract a variety of viral nucleic acids, the most common is applied with hepatitis C virus, hepatitis B virus, influenza virus, etc. To use this Kit only need to mix specimens and Proteinase K, then followed by transferring to the reagent plate. Through TANBead® Nucleic Acid Extractor (SLA-16/32, SLA-E132 Series) to conduct lysis, washing and elution steps. It spends only 40 minutes; the final product of nucleic acid can be directly process to analysis. For example: Real-Time PCR, RT-PCR.... With high sensitive, this reagent kit is suitable for clinical research and inspection units.

<u>Principle:</u> The silicon dioxide layer coated on the magnetic beads can absorb negative charged molecular in order to purify nucleic acid from samples.

<u>Sample Types:</u> 300 μl serum or PBS suspension <u>Suitable Instrument:</u> SLA-16/32, SLA-E132 Series

2. Kit Components and Storage Conditions

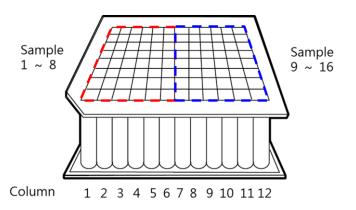
| REF 665A46 | | ∑ 96 Assays |
|----------------|--------|-------------------------------------|
| Reagent Plate | 6 | 96 well plate with reagent buffers |
| Elution Buffer | 1.5 ml | Nuclease-Free Water |
| Proteinase K | 1 ml | 20 mg/ml Proteinase K, store at 4°C |
| Strip | 12 | 8-channel strip |
| Protocol | 1 | Instruction guide for user |

Storage Conditions:

- 1. Components under room temperature (15~35 $^{\circ}$ 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 .

Regent Plate Content

| Column | Buffer Solution | Volume |
|--------|------------------|--------|
| 1/7 | Lysis Buffer | 600 μl |
| 2/8 | Washing Buffer 1 | 800 μ1 |
| 3/9 | Washing Buffer 2 | 800 μ1 |
| 4/10 | Washing Buffer 2 | 800 μ1 |
| 5/11 | Magnetic Beads | 800 μ1 |
| 6/12 | Elution Buffer | 80 μ1 |



3. Product Use Information

- Do not use expired kits.
- 2) When room temperature is below 20 $^{\circ}$ C. Please warm the reagent plate/tube at 42 $^{\circ}$ 60 $^{\circ}$ C for 5 $^{\circ}$ 10 min.
- 3) Do not shake the reagent vigorously in order to avoid the excess foam formation.
- 4) Do not expose plate/tube and bottle reagent to air for a long time, to avoid evaporation and changing pH then affecting purification efficiency.
- 5) All reagents should be transparent and colorless. The existence of colors indicates that the reagent is contaminated. Please replace another plate to continue following procedure.
- 6) Before use, inspect the completeness of the reagent plate/tube and strips.
- Please wear a mask and disposable gloves when manipulation.
- 8) Remove the aluminum foil carefully to avoid splashing of the reagent solution.
- Please use sterile consumables, and make sure that they are all nuclease free.
- 10) The procedures should not be changed.
- Because the reagent buffers contain guanidine salts, it is prohibited from washing with any detergents that contain bleach.
- 12) All reagents are to avoid contact with the eyes, skin, and clothes. If any contact or splashing has occurred, rinse with abundant amount of water.

4. Nucleic acid extraction protocol

Before operating, turn on the warm-up system of TANBead® Nucleic Acid Extractor, if it is equipped with temp. controller, please setting at 50° C.

- 1) Carefully remove the aluminum foil from reagent plate.
- Pipet 300 μl serum or PBS suspension and 10 μl Proteinase
 K into column #1/ #7 of reagent 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 regent plate completely to the bottom of plate rack.
 Make sure that the missing corner of reagent plate 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.
- Once the program has ended, buzzer shall alarm. Take out reagent plate carefully.
- 8) Use micropipette to transfer the purified nucleic acid from column #6/#12 to a clean tube.
- Put the used reagent plate and strips into the waste recovery can.

5. Program

| Progra | me Nan | ne: VIRUS -40-5 | Model: SLA-16/32, SLA-E132 Series | | | | | | |
|--------|--------|-----------------|-----------------------------------|-------------|-----|--------------|-------------|-------|-----------|
| Step | Well | Temp (℃) | 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 |

6. Explanation of Symbols

| Manufacturer | Temperature limitation | Use by | ∑√N> Contains sufficient for <n> tests</n> |
|----------------|----------------------------------|--------------------|--|
| LOT Batch code | (i) Consult instructions for use | REF Catalog number | IVD For in vitro diagnostic use |