TANBead® RNA Extraction Kit

REF 635S46 (for use with the SLA-16/32 and SLA-E132 Series)

CE IVD

1. Purpose

TANBead® RNA extraction kit (REF 635S46) are suitable for isolating a variety of viral nucleic acids, including intestinal virus, Japanese encephalitis virus, dengue virus, avian influenza virus and EB virus. Compared to conventional methods, these kits are with simplified procedure. It takes only 200 µl of serum by Proteinase K treatment, followed by transferring to the pre-filled 96-well plate. Subsequently, extraction processes are automated through TANBead® Nucleic Acid Extractor (SLA-16/32, SLA-E132 Series) by binding of nucleic acids to the beads, washing and elution. The final product is of excellent quality with no contamination of proteins, nucleases, and inhibitors. It can be directly processed to next experiments, such as polymerase chain reaction (PCR), real-time polymerase chain reaction (Real-Time PCR) and reverse transcription polymerase chain reaction (RT-PCR), etc. This kit is suitable for clinical research and inspection units.

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: 200 µl serum or PBS suspension
Suitable Instrument: SLA-16/32, SLA-E132 Series

2. Kit Components and Storage Conditions

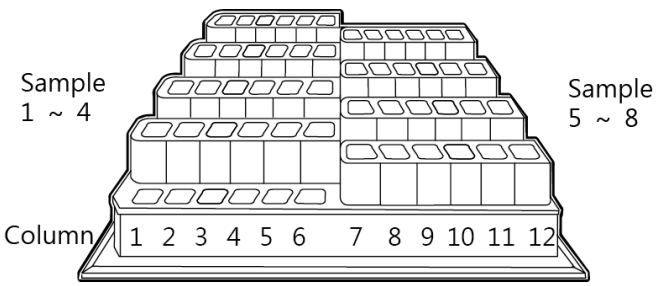
REF 635S46		Σ 96 Assays
Reagent Tube	96	6 well tube with reagent buffers
Base	2	A rack for 8 Reagent Tubes
Elution Buffer	20 ml	Nuclease-Free Water
Proteinase K	1 ml	20 mg/ml Proteinase K, store at 4℃
Strip	24	8-channel strip
Protocol	1	Instruction guide for user

Storage Conditions:

1. Components under room temperature (15~35 ℃) 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℃.

Assembled Reagent Tubes Content

Column	Buffer Solution	Volume
1/7	Lysis Buffer	700 µl
2/8	Washing Buffer 1	800 µl
3/9	Magnetic Beads	800 µl
4/10	Washing Buffer 2	800 µl
5/11	Washing Buffer 2	800 µl
6/12	Elution Buffer	100 µl



3. Product Use Information

1) Do not use expired kits.
2) When room temperature is below 20 ℃. Please warm the reagent plate/tube at 42 ~ 60 ℃ for 5 ~ 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.
7) Please wear a mask and disposable gloves when manipulation.
8) Remove the aluminum foil carefully to avoid splashing of the reagent solution.
9) Please use sterile consumables, and make sure that they are all nuclease free.
10) The procedures should not be changed.
11) 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 45℃.

Prepare the Assembled Reagent Tubes by inserting Reagent Tubes into the Base completely.

1) Pipet **200 µl serum or PBS suspension** into a 1.5 ml tube. Add 10 µl Proteinase K and mixing. Then incubate for 10~20 min at 56℃.
2) Carefully remove the aluminum foil from Assembled Reagent Tubes.
3) Carefully transfer 210 µl mixture into column **#1/ #7**.

Note: The volume ratio of mixture and lysis buffer is about 200 µl : 700 µl. If it is changed, it might be affected the performance.

4) Push Assembled Reagent Tubes completely to the bottom of plate rack. Make sure that the missing corner faces toward the door panel.
5) Push strips completely to the bottom of strip rack frame.
6) Close the door panel.
7) Select the program "**VIRUS-W4-AUTO**". The parameters are given in following section.
8) Once the program has ended, buzzer shall alarm. Take out Assembled Reagent Tubes carefully.
9) Use micropipette to transfer the purified nucleic acid from column #6/ #12 to a clean tube.
10) Put the used reagent tubes and strips into the waste recovery can.

5. Program

Programe Name: VIRUS-W4-AUTO					Model: SLA-16/32, SLA-E132 Series				
Step	**Well**	**Temp (℃)**	**Mixing (M)**	**Collect (S)**	**Rod**	**Mixing Speed**	**Volume (μl)**	**Pause**	**Vapor (M)**
1	3	45	1	60	ON	Medium	800	OFF	0
2	2	45	1	0	OFF	Medium	800	OFF	0
3	1	45	20	0	OFF	Low	900	OFF	0
4	2	45	0	60	ON	Medium	800	OFF	0
5	1	45	10	60	ON	Medium	900	OFF	0
6	2	45	2	60	ON	Medium	800	OFF	0
7	3	45	2	60	ON	Medium	800	OFF	0
8	4	45	2	60	ON	Medium	800	OFF	0
9	5	45	2	60	ON	Medium	800	OFF	10
10	6	45	5	120	ON	Medium	150	OFF	0
11	5	NA	1	0	OFF	Medium	800	OFF	0

6. Explanation of Symbols