TANBead® DNA Extraction Kit

REF 61EA46 (for use with the SLA-16/32 and SLA-E132 Series)

CE IVD

1. Purpose

TANBead® DNA Extraction Kit (REF 61EA46) has excellent performance and can be applied to most of the blood samples, especially for those viscous blood samples, which are usually difficult to handle, such as frozen blood stored at -20 ℃. Samples should be processed through an initial Proteinase K lysis. Subsequently, samples are processed by TANBead® Nucleic Acid Extractor (SLA-16/32, SLA-E132 Series) for nucleic acid extraction. The nucleic acid products are of high purity with extremely low salt content, no contaminants of proteins and inhibitors, and can be directly applied for following tests, such as the polymerase chain reaction (PCR), enzyme reactions, DHPLC (Denaturing high performance liquid chromatography) and other clinical tests.

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: 250 ~ 300 µl whole blood, frozen blood or buffy coat
Suitable Instrument: SLA-16/32, SLA-E132 Series

2. Kit Components and Storage Conditions

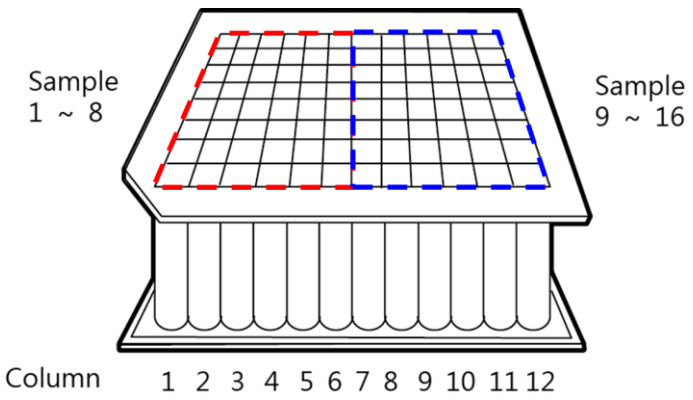
REF 61EA46		Σ 96 Assays
Reagent Plate	6	96 well plate with reagent buffers
Lysis Buffer	45 ml	Guanidine salt, Tris buffer, surfactants
Elution Buffer	1.5 ml x 2	Nuclease-Free Water
Proteinase K	20 mg	Please add 1 ml Elution Buffer before using and store at -20 ℃
Strip	12	8-channel strip
Protocol	1	Instruction 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 -20 ℃.
3. Repeating of freezing and thawing may cause the activity decay of Proteinase K.

Reagent Plate Content

Column	Buffer Solution	Volume
1/7	-	-
2/8	Washing Buffer 1	800 µl
3/9	Magnetic Beads	800 µl
4/10	Washing Buffer 3	800 µl
5/11	Washing Buffer 3	800 µl
6/12	Elution Buffer	130 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 reagent 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 60℃.

1) Carefully remove the aluminum foil from reagent plate.
2) Add **250 ~ 300 µl blood** and **10 µl Proteinase K** into column #1/ #7.
3) Push reagent plate completely to the bottom of plate rack. Make sure that the missing corner faces toward the door panel.
4) Push strips completely to the bottom of strip rack frame.
5) Close the door panel and start the program "**PK-10min**".
6) Buzzer will alarm after 10 min, turn off and take out reagent plate.
7) Add **400 µl Lysis Buffer** into column **#1/ #7** of reagent plate.
8) Please setting at 45℃ if Nucleic Acid Extractor is equipped with temp. controller.
9) Place Reagent Plate back to the plate rack, and close the door panel.
10) Select the program "**VIRUS-W4-AUTO**". The parameters are given in following section.
11) Once the program has ended, buzzer shall alarm. Take out reagent plate carefully.
12) Use micropipette to transfer the purified nucleic acid from column #6/ #12 to a clean tube.
13) Put the used reagent plate 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

Manufacturer

Temperature limitation

Use by

Contains sufficient for <N> tests

LOT Batch code

Consult instructions for use

REF Catalog number

IVD For in vitro diagnostic use