TANBead® Nucleic Acid Extraction Kit

Tissue Total DNA Auto Plate

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

CE IVD

REF 6T2A46

1. Purpose

TANBead® Nucleic Acid Extraction Kit (REF 6T2A46) is dedicated to the isolation of DNA from tissues that are difficult to be lysed. Samples need to be first treated with proteinase K, followed by adding samples onto Auto Plate/Tube and processed by TANBead® Nucleic Acid Extractor (SLA-16/32, SLA-E132 Series), which is simple and automated by taking up to 32 samples. The protocol dramatically reduces experimental time and enhances consistency and reproductivity of DNA isolation and is suitable for laboratories with large volume of samples.

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: 50 ~ 100 mg tissue samples

Suitable Instrument: SLA-16/32, SLA-E132 Series

2. Kit Components and Storage Conditions

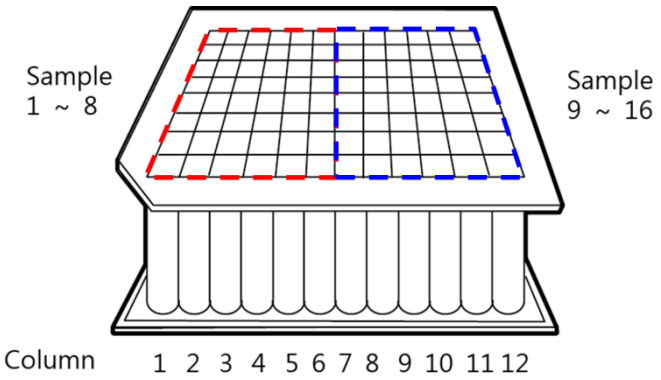
REF 6T2A46		Σ 96 Assays
Auto Plate	6	96 well plate with reagent buffer
Proteinase K	1 ml	20 mg/ml Proteinase K, store at 4℃
Incubation Buffer	25 ml	Tris buffer, surfactants, pH 8.0
Elution Buffer	20 ml	Nuclease-Free Water
Strip	12	8-channel strip
Protocol	1	Instruction guide for user

Storage Conditions:

1. Components under room temperature (15~35 ℃) can be stored until the expiration date labeled on the box.
2. The proteinase K is transported at room temperature. When received, please store proteinase K at 4℃.

Auto Plate 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	130 µl



3. Product Use Information

1) Do not use expired kits.
2) When room temperature is below 20 ℃. Please warm the Auto 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 Auto 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

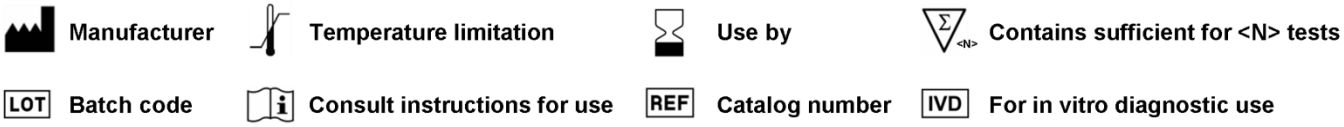
Before operating, turn on the warm-up system of TANBead® Nucleic Acid Extractor, if it is equipped with temp controller, please setting at 45℃.

1) Add **200 µl incubation buffer** and **10 µl Proteinase K** into 1.5ml tube.
2) Put 50~100mg tissue into 1.5ml tube and mix well.
3) After incubation at 56 ℃ for 2~4 hours or overnight, centrifuged at 8000 RPM for 1 minute.
4) Carefully remove the aluminum foil from Auto Plate.
5) Use micropipette to load 200 µl lysate into column **#1/ #7** of Auto Plate.
6) Push Auto Plate completely to the bottom of plate rack. Make sure that the missing corner of Auto Plate faces toward the door panel.
7) Push strips completely to the bottom of strip rack frame.
8) Close the door panel.
9) Select the program "**L-BNA-PK-AUTO**". The parameters are given in following section.
10) Once the program has ended, buzzer shall alarm. Take out Auto Plate carefully.
11) Use micropipette to transfer the purified nucleic acid from column #6/ #12 to a clean tube.
12) Put the used Auto Plate and strips into the waste recovery can.

5. Program

Programe Name: L-BNA-PK-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	90	ON	Medium	800	OFF	0
2	2	45	1	0	OFF	Medium	800	OFF	0
3	1	45	10	0	OFF	Low	900	OFF	0
4	2	45	0	90	ON	Medium	800	OFF	0
5	1	45	10	90	ON	Medium	900	OFF	0
6	2	45	5	90	ON	Medium	800	OFF	0
7	3	45	5	90	ON	Medium	800	OFF	0
8	4	45	5	90	ON	Medium	800	OFF	0
9	5	45	5	90	ON	Medium	800	OFF	10
10	6	45	10	120	ON	Medium	200	OFF	0
11	5	NA	1	0	OFF	Medium	800	OFF	0
12	0	NA	0	0	OFF	Medium	0	OFF	0

6. Explanation of Symbols



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