Animal Tissue Cell Total DNA Extraction Kit

Cat#: 8028011

[Product name]
Animal Tissue Cell Total DNA Extraction Kit

[Model & Size]

Product Name	Cat No.	Size	Component No.	Component Name	Component Size	Quantity
Animal Tissue Cell Total DNA Extraction Kit	8028011	50 PCS/Kit	8028011-1	Balanced Buffer	5 mL	1 bottle
			8028011-2	Lysate Buffer	11 mL	1 bottle
			8028011-3	Binding Buffer	11 mL	1 bottle
			8028011-4	Inhibitor Removal Solution	25 mL	1 bottle
			8028011-5	Wash Buffer*	15 mL	1 bottle
			8028011-6	Elution Buffer	15 mL	1 bottle
			8028011-7	Proteinase K	1 mL	1 bottle
			8028011-8	Adsorption Column and Collection Tube	50 pcs	1 bag

*** Before the first use, 60 mL ethanol (96%-100%) should be added to Wash Buffer.**

[Product Description]
Animal Tissue Cell Total DNA Extraction Kit uses a centrifugal adsorption column that can specifically bind DNA and a unique buffer system for rapid extraction of genomic DNA from animal tissues and cells. The unique binding solution/proteinase K rapidly lyses cells and inactivates intracellular nucleases, and genomic DNA is selectively adsorbed on the silicon matrix membrane in the centrifuge column. Then a series of rapid rinse-centrifugation steps are used to remove cell metabolites, proteins and other impurities. Southern-blot and various enzyme digestion reactions.
The kit is fast and simple, and a single sample can be generally completed within 30 minutes, and the purity of genomic DNA after extraction is high.

[Storage And Transportation]
Store at 2℃~30℃ for 24 months. Protease K was stored in readymade glycerol buffer at 2℃~8℃ 12 months, Store at -25℃~-15℃ for 2 years.
Transported on room temperature.

[Operating Instructions](Please read the notes before the experiment)

Column equilibration: The adsorption column should be pretreated with balanced buffer before the experiment to improve the nucleic acid binding ability. Take the required amount of adsorption column (adsorption column into the collection tube), add 100 μL of balanced buffer, centrifuged at 13,000×g for 60 seconds, pour out the waste liquid in the collection tube, and put the adsorption column back into the collection tube for later use.

1. Cultured cells

A. Collect about 10^6-10^7 suspended cells into a 1.5 mL centrifuge tube (no more than 1×10^7 cells); For adherent cells, the cells were first digested with trypsin and blown down for

collection.

b. Centrifuged at 13,000×g for 60 seconds to remove the supernatant and leave the cells to settle.

c. The cells were resuspended in 200 μL of 1×PBS, centrifuged at 13,000×g for 60 seconds, the supernatant was discarded, and the cell precipitate was resuspended in 180 μL of 1×PBS.

d. Add 20 μL proteinase K (20 mg/mL) solution, mix thoroughly, then add 200 μL binding buffer, vortex and shake thoroughly at once, and place at 70°C for 10 minutes.

Optional steps: if there is A lot of RNA residue and the RNA needs to be removed, you can add 20 μL RNase A(25mg/mL) after the completion of step d, it is recommended to use RNaseA(Cat.No. 8051011) to shake and mix, and leave at room temperature for 5-10 minutes.

e. Step 3 of connection operation.

2. Animal organization

A. Take fresh or thawed tissue (≤25 mg), add 180 μL of lysate buffer, quickly grind and mix on ice to make a homogenate.

b. Add 20 μL proteinase K solution (20 mg/mL) and mix thoroughly immediately by vortexing and shaking.

C. Place the lysates in a water bath at 56°C for 1-3 hours or until tissue digestion is complete, during which time gently shake several times to help lysis.

Optional steps: if more RNA remains and need to be removed, you can add 20 μL RNase A (25 mg/mL) solution after the completion of step c, shake and mix, and place at room temperature for 5-10 minutes.

d. Add 200 μL binding buffer, immediately vortex and shake to mix thoroughly, and place at 70°C for 10 minutes.

e. Connecting operation step 3.

3. After cooling, add 100 μL isopropanol, immediately vortex and shake to mix thoroughly.

4. Add the mixture (including the flocculent precipitate) to the adsorption column (the adsorption column is put into the collection tube), centrifuged at 13,000×g for 60 seconds, and discard the waste liquid.

5. Add 500 μL of inhibitor removal solution, centrifuge at 12,000×g for 60 seconds, and discard the waste solution.

6. Add 600 μL of wash buffer (check whether absolute ethanol has been added to the reagent bottle), centrifuge at 12,000×g for 60 seconds, discard the waste solution, and repeat this step once.

7. Put the adsorption column back into the collection tube, centrifuged at 13,000×g for 2 minutes, and removed the rinse solution as far as possible to avoid the residual ethanol in the rinse solution inhibiting the downstream reaction.

8. Put the adsorption column in a new 1.5 mL centrifuge tube, add 100 μL elution buffer to the center of the membrane, and place it at room temperature for 3-5 minutes.

9. Genomic DNA was eluted by centrifugation at 12,000×g for 60 seconds and stored at -20°C.

Note: If necessary, the eluted solution can be sucked back into the adsorption column, left to stand for 3-5 minutes, and centrifuged at 12000×g for 60 seconds to increase DNA concentration; Preheat the eluent to 65-70℃ in advance for better performance.

[Precautions]

1. Read the instructions carefully before using.

2. Bring your own 1×PBS, isopropanol, absolute ethanol, RNase A, 1.5 mL centrifuge tube, and 2 mL centrifuge tube.

3. Before the first use, add 60 mL of absolute ethanol to the rinse bottle.

4. Precipitation and precipitation of binding solution and inhibition solution may occur at low temperature. It can be re-dissolved in a water bath for a few minutes at 37°C, and cooled to room temperature after clarification.

5. Due to the differences in samples, pre-experiments can be carried out to determine the best experimental conditions.

6. Proteinase K is stored in immediate glycerol buffer. Repeated freezing and thawing may reduce the enzyme activity.
7. This product is limited to the scientific research of professionals. For your safety and health, please wear a laboratory coat and wear disposable gloves to operate. If the reagent is contaminated with skin or eyes, rinse with a lot of water or normal saline.

[Description Of Product Symbol]

Product Symbol	Description	Product Symbol	Description
	Catalog Number		Batch Code
	Date of Manufacture		Manufacturer
	Use-by date		Temperature limit
	Consult instructions for use		

[Company Information]
Manufacturer and after-sales service unit Name: Shenzhen Dakewe Bio-engineering Co., Ltd.
Website: www.dakewe.com
Telephone: (86-755) 86235300
Email: RD@dakewe.com
Address: Room 702-703, Building No.1, Shenzhen Biomedicine Innovations Industrial Park, No.14 Jinhui Road, Kengzi Street, Pingshan District, Shenzhen, China
After-sales service telephone: (86-755) 86235300
Zip Code: 518122