(DP304) TIANamp Genomic DNA Kit

—Anticoagulant whole blood (300 μl ~1 ml)

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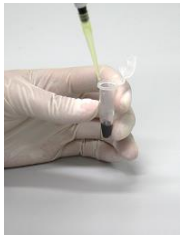
Ver. No. 20170328

Experiment Preparation

1. Anticoagulant blood 300 μl~1 ml
2. Self-prepared reagents: 96-100% ethanol; Red Blood Cell Lysis Buffer (Cat. No. RT122)
3. Pipette and matched sterile tips (10 μl, 200 μl, 1 ml); 1.5 ml centrifuge tubes
4. Vortex oscillator; Dry bath/water bath; Centrifuge




Note: This experiment takes human blood as an example. The whole blood of mammals can be extracted by this process. For anticoagulant blood of poultry, birds, amphibians or lower organisms, the red blood cells are nucleated cells, so the starting sample volume is 5-20 μl, and Buffer GS should be added to top up to 200 μl. For blood clot samples, the Liquefaction Columns CX1 (TIANGEN, RK165) (self-provided) can be selected to treat the blood clot.

Experiment Preparation - Kit Preparation

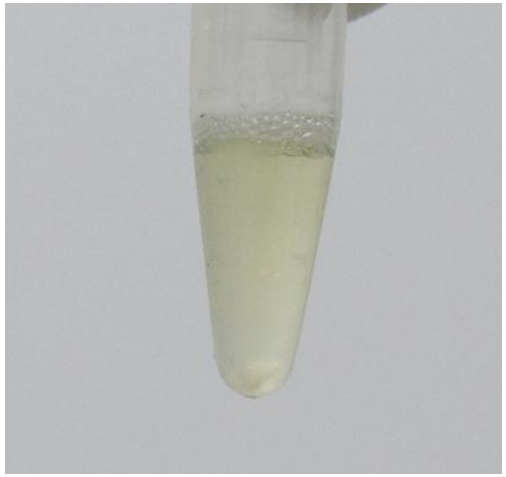
Please add 96-100% ethanol in Buffer PW and GD before use according to the volume indicated on the label of the bottle.

Step 1

Add 3 times volume of Red Blood Cell Lysis Buffer

Mix well upside down and put at room temperature for 5 minutes, and mix well upside down for a few more times during the period.

Centrifuge at 10,000 rpm (~11,500×g) for 1 min, and remove supernatant



Leave leukocyte precipitate, and add 200 µl Buffer GA and thoroughly mix by vortex.

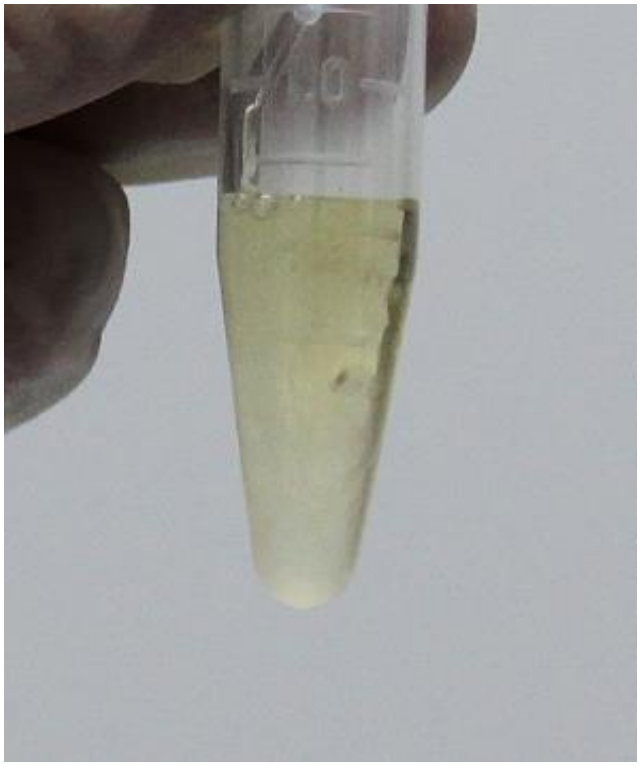
Step 2

Add 200 μl Buffer GB and 20 μl Proteinase K, and mix well upside down.

Step 3

Place it at 70℃ for 10 min, and the solution should be clear. Briefly centrifuge to remove water drops of the cap and inner wall.

Step 4



Add 200 μl 96-100% ethanol, mix thoroughly by vortex for 15 sec, there may be flocculent precipitate at this time. Briefly centrifuge to remove water drops of the cap and inner wall.

Step 5

Transfer the solution and flocculent precipitate from the previous step to Spin Column CB3.

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, discard the waste liquid in the collection tube and place the Spin Column CB3 into the collection tube.

Step 6

Add 500 μl Buffer GD to Spin Column CB3

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, discard the waste liquid in the collection tube and place the Spin Column CB3 into the collection tube.

Step 7

Add 600 μl Buffer PW to Spin Column CB3 (ensure 96-100% ethanol has been added before use).

Centrifuge at 12,000 rpm (~13,400×g) for 30 sec, discard waste liquid in the collection tube and place the Spin Column CB3 into the collection tube.

Step 8 Repeat step 7.

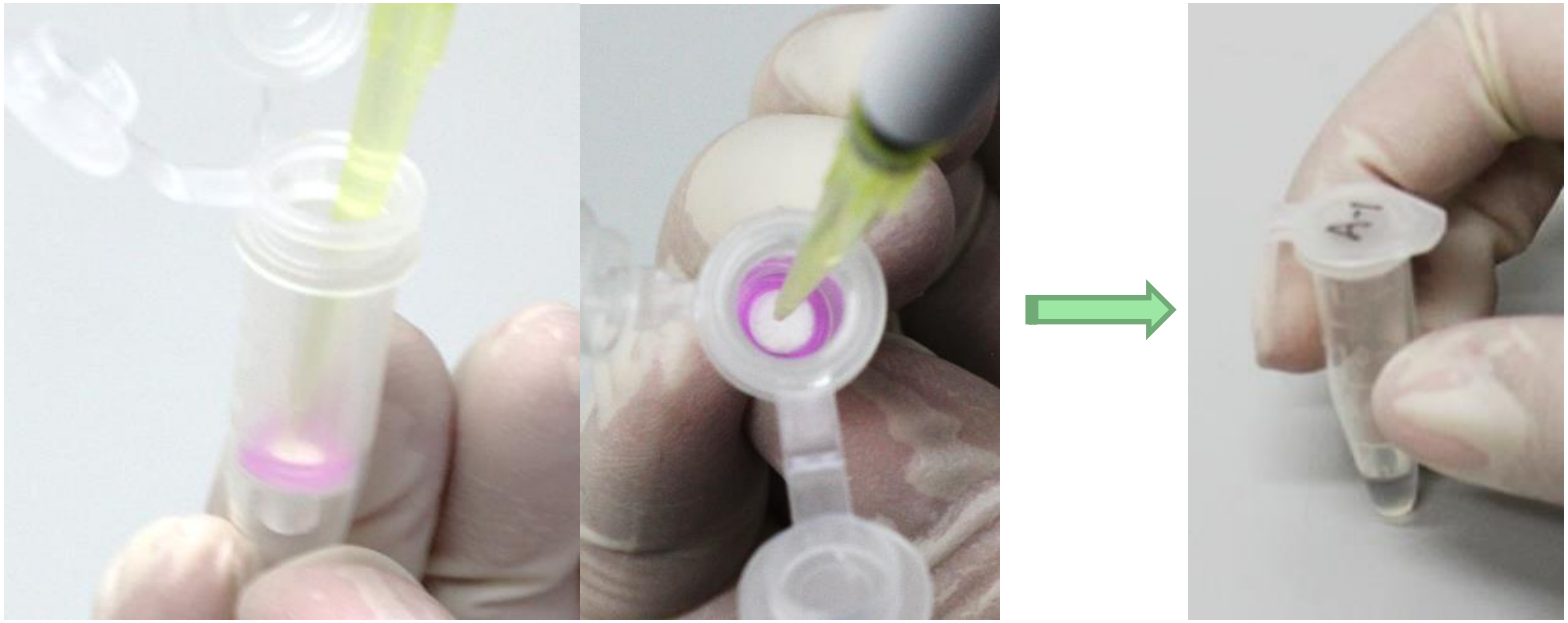
Step 9

Centrifuge at 12,000 rpm (~13,400×g) for 2 min, and discard the waste liquid.

Place the Spin Column CB3 at room temperature for 2 minutes to completely dry Buffer PW in the membrane.

Note: Ethanol residues in Buffer PW can inhibit subsequent enzymatic reactions (restriction enzyme digestion, PCR, etc.) experiments.

Step 10



Transfer the Spin Column CB3 into a 1.5 ml centrifuge tube, and add 50-200 μl Buffer TE to the middle of the adsorption membrane. Place at room temperature for 2 min and centrifuge at 12,000 rpm (~13,400×g) for 2 min to collect the solution into the centrifuge tube.