Genomic DNA Prep Kit (Blood)

9K-006-0013 (400 preps) / 9K-006-0018 (3300 preps)

store at room temperature 20°C ~ 25°C

BIO BASIC INC.

Protocol

Prepare Isopropanol and 80% Ethanol before using the Kit. Preheat a bath at 65°C for incubation.

Cell Lysis

Please note: That if you are using mammalian cells from cell culture, please start with pelleted cells at step 2. It is possible to use up to $6x10^6$ cells per prep.

1. Add 300µL of whole blood (or bone marrow) to a 1.5mL microcentrifuge tube containing 900µL of **RBC Lysis Solution**. Incubate for 3min. at room temperature. (Note: If blood collection occured >1 hour ago, increase the incubation time to 10min to complete cell lysis)
2. Centrifuge for 30 sec. at 13,000-16,000xg. Remove the supernatant with a pipet for leaving behind the visible white cell pellet and about 10-20µL of the residual liquid.
3. Vortex the tube vigorously for 10 sec. to resuspend the white cells in the residual liquid. (The white cells should be completely resuspended.)
4. Add 300µL **Cell Lysis Solution** to the resuspend cells and pipet up and down to release the cells.

Protein Precipitation

5. Add 100µL of **Protein Precipitation Solution** to the cell lysate.
6. Vortex vigorously for 20 sec. to mix well.
7. Centrifuge at 13,000 ~16,000xg for 1min. The precipitated proteins should form a tight, dark brown pellet.
   (If the protein pellet is not tight, repeat Step 6, followed by incubation on ice for 5min then repeat Step 7.)

DNA Precipitation

8. Transfer the supernatant to a clean1.5mL microcentrifuge tube containing 300µL of **100% Isopropanol** (2-propanol).
9. Mix the sample thoroughly by gentle inversions.
10. Centrifuge at 13,000-16,000xg for 1 min. (White DNA pellet will be formed.)
11. Discard the supernatant and drain tube briefly on clean absorbent paper. Add 300µL of **80% Ethanol** and invert the tube several times to wash the DNA pellet.
12. Centrifuge at 13,000-16,000xg for 1 min. Carefully discard the ethanol and dry at room temperature for about 10~15 min.

DNA Hydration

13. Add 50µL~100µL of **DNA Hydration Solution**.
14. Vortex 5 sec. at medium speed to mix.
15. Incubate the sample at 65°C for 10~30 min.
16. Store the DNA at 4°C. (For long time storage, store sample at -20°C or -80°C).