PRODUCT INFORMATION

Rapid Blood Genomic DNA Extraction Kit

Product information for BT4782:

Kit Contents

Components	BT4782, 50 Preps
Buffer TBP	40 ml
Universal Buffer Digestion	10 ml
Buffer PR	4 ml
Proteinase K	1.2 ml
TE Buffer	50 ml
Protocol	1

Storage

Transportation at ambient temperature, Store at 4°C, Valid for 1 year.

Introduction

The kit allows simple and fast isolation of high quality genomic DNA from fresh and anti-coagulated blood. The entire procedure takes approx. 15 minutes only. Up to 5 ml of blood sample can be treated for each mini-preps. Average DNA yields are 20~60 µg per ml of the whole blood sample. Purified DNA can be used in a wide range of downstream applications.

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Features

- ✓ High quality. OD_{260}/OD_{280} of purified DNA is between 1.8~2.0, and can be directly used for downstream applications, such as PCR, Restriction Enzyme Digestion, Southern blotting.
- ✓ Simple procedure. Take 15 min to complete the whole procedure.
- ✓ High Yield. The yield of DNA is generally at 20~60 µg of 1 ml whole blood, and up to 5 ml of whole blood can be used in a single prep.
- ✓ Easy to scale up.
- ✓ Non toxic.

Procedures

1. Transfer 300µl anti-coagulated blood to a clean 1.5 ml tube. Add 600µl Buffer TBP, mix well and incubate for 1 min at room temperature.

> **Note 1**: For frozen blood sample, pre-warm sample at 37°C for 3 minutes.
>
> **Note 2:** For a fowl blood sample, transfer 100µl of the blood sample to 1.5 ml microtube, go to step 4.

2. Centrifuge at 12,000 x *g* for 1 min at room temperature, discard supernatant carefully.

3. Add 500µl TE Buffer, suspend the deposit gently but thoroughly, Centrifuge at 12,000 x *g* for 1 min at room temperature, discard supernatant carefully.

> **Note:** Repeat this step once if necessary.

4. Add 180µl Buffer Digestion and 20µl Proteinase K, mix thoroughly. Incubate at 56°C for 20~30 min.

> Note: To obtain RNA-free DNA, add 20µl RNase A solution (20 mg/ml) to the tube, mix thoroughly and incubate at room temperature for 5 minutes.

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5. Add 60µl of Buffer PR, mix by inverting 5~10 times, incubate at -20°C for 20 minutes.

6. Centrifuge at 12,000 x *g* for 5 minutes at room temperature. Transfer the supernatant to a new 1.5 ml tube.

7. Add equal volume of isopropanol (approx 0.15~0.25 ml) to the solution, mix well by inverting 5 times. Incubate at room temperature for 2~5 minutes. Centrifuge at 12,000 x *g* for 5 minutes, discard the supernatant carefully.

8. Add 1 ml of pre-cooled 75% ethanol to the tube, mix well by inverting 10 times. Centrifuge at 12,000 x *g* for 1 minute, discard the supernatant.

9. Repeat the Step 8 once.

10. Air-dry the pellet at room temperature with the lid open for 2~5 minutes.

Note: Don't over dry.

11. Add 50~200µl of TE buffer to dissolve DNA pellet. Keep at 4°C for a couple hours until DNA pellet is completely dissolved. Purified DNA is ready for use. Or store at -20°C for long term storage.

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NOT INTENDED FOR HUMAN OR ANIMAL USE!

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