FavorPrep™ Blood Genomic DNA Extraction HE Mini Kit

Kit Contents

Cat. No.	FABG1030 (4 Preps)	FABG1033 (50 Preps)	FABG1034 (100 Preps)
FABG Buffer	1.5 ml	20 ml	40 ml
W1 Buffer (Concentrate)▲	1.3 ml x 2	22 ml	44 ml
Elution Buffer	0.5 ml	5 ml	7 ml
Proteinase K (Liquid)	150 µl	1600 µl	1600 µl x 2
HE columns	4 pcs	50 pcs	50 pcs x 2
HE Collection Tubes	8 pcs	100 pcs	100 pcs x 2
Elution Tubes	4 pcs	50 pcs	100 pcs
User Manual	1	1	1
Preparation of **W1 Buffer** by adding 96~100% ethanol.			
Volume of Ethanol for W1 Buffer▲	0.5 ml	8 ml	16 ml

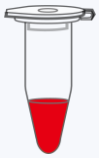
All kit components are shipped at room temperature and should be stored at room temperature between 15~25°C.

Specification

Format/Principle	Spin column (Silica matrix)
Binding Capacity	≤125 µg DNA/Column
Operation Time	<45 mins
Sample Size	≤300 µl whole blood or buffy coats
DNA yield	4~12 µg/300 µl whole blood
Elution Volume	30 µl

Procedure Overview

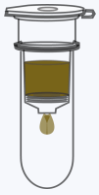
Sample



- Load 300 µl sample.
- (Optional) Add RNase A.
- Cell lysis (30 µl Proteinase K and 330 µl FABG Buffer) at 60˚C for 15 mins (vortex per 3~5 mins).

- Incubate the sample mixture at room temperature for 5 mins.
- Add 330 µl ethanol (96~100%).

HE Column



Centrifuge
12,000 xg, 1 min

- Transfer the mixture into the HE Column for DNA binding.

Centrifuge
12,000 xg, 1 min

- Add 500 µl W1 Buffer (ethanol contained).

Centrifuge
12,000 xg, 2 mins

- Add 500 µl ethanol (96~100%) and dry the column membrane.

Centrifuge
12,000 xg, 1 min

- Add 30 µl Elution Buffer.
- Stand the column for 5 mins.
- Obtain purified genomic DNA.

■ Preparation Before Starting

1. Add the indicated volume of ethanol (96~100%) into the **W1 Buffer**, mix well, and store at room temperature.
2. Additional materials: 96~100% ethanol, RNase A (Cat. No. FARA2093, optional).
3. Set up a water bath or dry bath at 60˚C and preheat the **Elution Buffer** to 60˚C for the elution step.

■ General Protocol

1. Load 300 µl sample (whole blood or buffy coat) into a microcentrifuge tube (not provided).
   - If the sample volume is less than 300 µl, add the appropriate volume of PBS.
2. **(Optional)** If RNA-free genomic DNA is required, add 12 µl of 50 mg/ml RNase A (not provided). Mix thoroughly and incubate at room temperature for 2 mins.
3. Add 30 µl **Proteinase K** and 330 µl **FABG Buffer** into the sample mixture. Mix thoroughly by vortexing or pipetting.
   - **DO NOT** add proteinase K directly into FABG buffer.
4. Incubate the mixture at 60˚C for 15 mins to lyse the sample. During incubation, vortex the sample every 3~5 mins interval. Incubate the sample mixture at room temperature for 5 mins.
5. Add 330 µl ethanol (96~100%) to the sample mixture. Mix thoroughly by pulse-vortexing.
6. Place an **HE Column** in an **HE Collection Tube,** then transfer all mixture carefully into the HE Column.
7. Centrifuge at 6,000 xg for 1 min. Discard the flow-through and place the HE column in a new HE Collection Tube.
8. Add 500 µl **W1 Buffer** (ethanol contained) to the HE Column. Centrifuge at 12,000 xg for 1 min then discard the flow-through.
9. Add 500 µl ethanol to the HE Column. Centrifuge for 2 mins to dry the membrane. Discard flow-through and HE Collection Tube.
   - **Important step!** Don't let the tip of the column touch the flow-through. If in doubt, spin again to remove all residual ethanol.
10. Place the HE column in an **Elution Tube**, then add 30 µl prewarmed **Elution Buffer** or ddH_2O (pH 7.5~9.0) directly onto the membrane. Stand the HE column for 5 mins.
    - **Important step!** For effective elution, ensure that the elution solution is dispensed onto the membrane center and absorbed completely.
11. Centrifuge at 12,000 xg for 2 mins to elute the DNA.