FavorPrep™ Blood Genomic DNA Extraction HE Mini Kit

Kit Contents

Cat. No.	FABG103-004 (4 Preps)	FABG103-050 (50 Preps)	FABG103-100 (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
FABG HE Columns	4 pcs	50 pcs	50 pcs x 2
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

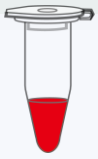
All kit components are shipped at room temperature and should be stored at room temperatures between 15~25°C.

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

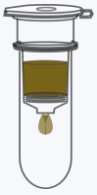
Sample



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

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

FABG HE Column



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

Centrifuge
6,000 xg, 1 min

- Add 500 µl W1 Buffer (ethanol contained).
- Add 900 µl ethanol (96~100%).

Centrifuge
12,000 xg, 1 min

Centrifuge
12,000 xg, 2 mins

- Drying the column membrane.

- Elution (add 30 µl Elution Buffer).
- Stand the column for 5 mins at room temperature.

Centrifuge
12,000 xg, 1 min

- 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 (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. Placed a **FABG HE Column** in a **Collection Tube,** then transfer all mixture carefully into the FABG HE Column.
7. Centrifuge at 6,000 xg for 1 min. Discard the flow-through and place the **FABG HE Column** in a new Collection Tube.
8. Add 500 µl **W1 Buffer** (ethanol contained) to the FABG HE Column. Centrifuge at 12,000 xg for 1 min then discard the flow-through.
9. Add 900 µl **ethanol** (96~100%) to the FABG HE Column. Centrifuge at 12,000 xg for 1 min then discard the flow-through.
10. Centrifuge at 12,000 xg for 2 mins to dry the membrane. Discard the flow-through and the collection tube.
11. Place the FABG 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 FABG HE Column for 5 mins.
    - **Important step!** For effective elution, ensure that the elution solution is dispensed onto the membrane center and absorbed completely.
12. Centrifuge at 12,000 xg for 1 min to elute the DNA.

For more product information, please visit **https://www.favorgen.com/**
For technical assistance, please email us at **Technical@favorgen.com**