FavorPrep™ Tissue Genomic DNA Extraction HE Mini Kit

■ Kit Contents

Cat. No.	FATG1030 (4 Preps)	FATG1033 (50 Preps)	FATG1034 (100 Preps)
FATG1 Buffer	1.5 ml	20 ml	40 ml
FATG2 Buffer (Concentrate)▲	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
Micropestles	4 pcs	50 pcs	50 pcs x 2
User Manual	1	1	1
Preparation of **FATG2 Buffer** and **W1 Buffer** by adding 96~100% ethanol.			
Volume of Ethanol for FATG2 Buffer▲	1.5 ml	20 ml	40 ml
Volume of Ethanol for W1 Buffer■	0.5 ml	8 ml	16 ml

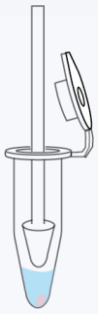
All kit components are shipped at room temperature and should be stored at room temperature between 15~25°C.

■ Specification

Format/Principle	Spin Column (silica matrix)
Binding Capacity	≤125 µg DNA/Column
Operation Time	<45 mins
Sample Size	≤30 mg Tissue
DNA yield	≤30 µg
Elution Volume	30 µl

Procedure Overview

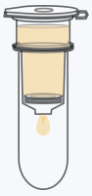
Sample



- Cut the tissue (up to 30 mg) into a 1.5 ml tube.
- Grind sample with 360 µl FATG1-PK mixture using micropestle or homogenizer.
- (Optional) Add RNase A, incubate sample at room temperature for 2 mins.
- Incubation at 56˚C for 10 mins.

- Add 660 µl FATG2 Buffer (ethanol contained).
- Mix thoroughly by pulse-vortexing.

HE Column



Centrifuge
12,000 xg, 1 min

- Transfer all the mixture into 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, 2 mins

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

Preparation Before Starting

1. Additional materials: 96~100% ethanol, RNase A (Cat. No. FARA2093, optional).
2. Add indicated volume of ethanol (96~100%) into **FATG2 Buffer** and **W1 Buffer**, mix well and store at room temperature.
3. (Optional) For long-term DNA storage, immerse the tissue in FavorPrep™ NApreserve Reagent (Cat. No. FNPR1084) as instructed in the user manual.
4. Check **FATG1 Buffer** for precipitates before use. If precipitates are observed, warm-up FATG1 Buffer at 37˚C until precipitates are completely dissolved.
5. Set up a water bath or dry bath at 56˚C and preheat the Elution Buffer to 56˚C for elution step.
6. All centrifugation steps should be performed at **12,000 ×g** at room temperature.
7. Fresh preparation of **FATG1-PK mixture**, premix 330 µl FATG1 Buffer, 30 µl Proteinase K and 8 µl of 50 mg/ml RNase A (Optional, If RNA-free genomic DNA is required) per sample before execute DNA extraction.
8. For bacteria or blood samples, please refer to the **special protocols** available on the FATG103 product page of the official website.

General Protocol

1. Cut tissue sample (up to 30 mg) in a microcentrifuge tube (not provided). Add 360 µl **FATG1-PK mixture** to the tube.
2. Use provided **Micropestle** or homogenizer to grind the tissue sample. Mix thoroughly and spin down.
3. **(Optional)** If RNase A was added, incubate sample at room temperature for 2 mins.
4. Incubate mixture at 56˚C for 10 mins until the tissue is lysed completely. Vortex occasionally during incubation.
5. Add 660 µl **FATG2 Buffer** (ethanol contained) 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 for 1 min. Discard 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 for 1 min then discard 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.
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 for 2 mins to elute DNA.

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