

Kit Contents:

Cat. No:	FAFFM004B (4 preps)	FAFFM050B (50 preps)	FAFFM100B (100 preps)
FATG1 Buffer	1.5 ml	15 ml	30 ml
FATG2 Buffer	1.5 ml	15 ml	30 ml
Proteinase K (lyophilized)	1 mg	11 mg	11 mg x 2
W 1 Buffer* (concentrate)	1.3 ml	22 ml	44 ml
Wash Buffer** (concentrate)	1 ml	10 ml	20 ml
Elution buffer	1 ml	15 ml	30 ml
TG Micro Columns Δ	4 pcs	10 pcs x 5	10 pcs x 10
Collection Tubes	4 pcs	50 pcs	100 pcs
Elution Tubes	4 pcs	50 pcs	100 pcs
User Manual	1	1	1

Δ Store the TG Micro Columns to 4 ~ 8 °C upon receipt.

Preparation of Proteinase K solution (10 mg/ml) by adding ddH ₂ O			
ddH ₂ O volume for Proteinase K	0.1 ml	1.1 ml	

Preparation of W 1 Buffer and Wash Buffer by adding ethanol (96 ~ 100%)			
* Ethanol volume for W 1 Buffer	0.5 ml	8 ml	16 ml
**Ethanol volume for Wash Buffer	4 ml	40 ml	80 ml

Specification:

Principle: mini spin column (silica matrix)
 Minimum elution volume: 12 µl
 Sample size: < 25 mg fixed tissue

Important Notes:

- Additional requirement** : Xylene, RNase A (optional), 96~100% ethanol
- Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffers.
- Add 1.1 ml sterile ddH₂O to Proteinase K tube to make a **10 mg/ml** stock solution. Vortex and make sure that Proteinase K has been completely dissolved. **Store the stock solution at 4 °C.**
- Add ethanol (96- 100 %) to **W1 Buffer** and **Wash Buffer** when first open.
- Prepare dry baths or water baths before the operation: one to 60 °C for step 10 and the other to 90 °C for step 12.
- Preheat the Elution Buffer to 65 °C for step 19.
- All centrifuge steps are done at full speed (~ 18,000 x g) in a microcentrifuge.

Protocol: Isolation of DNA from paraffin-fixed tissue

Please Read Important Notes Before Starting Following Steps.

- Add up to 12 mg of paraffin slice sample to a microcentrifuge tube.
- Add 1 ml xylene and mix well. Close the lid and vortex vigorously for 10 sec. Incubate the sample at room temperature until the paraffin is dissolved completely.
- Centrifuge at full speed for 5 min. Remove the supernatant by pipetting.
- Add 1 ml ethanol (96- 100 %) to the deparaffined tissue and mix gently by vortexing.
- Centrifuge at full speed for 3 min. Remove the supernatant by pipetting.
- Repeat step 4 and 5.
- Incubate at 37 °C for 10 ~15 min to evaporate ethanol residue completely.
- Add 200 µl FATG1 Buffer and mix well.
- Add 20 µl Proteinase K (10mg/ml) to the sample mixture. Mix thoroughly by vortexing.
- Incubate at 60 °C until the tissue is lysed completely (1~3 h).** Vortex occasionally during incubation.
 --- Sample can be incubated overnight as well for complete lysis.
- (Optional)** If RNA-free genomic DNA is required, add 4 µl of 100 mg/ml RNase A (not provided). Mix thoroughly by vortexing and incubate at room temperature for 2 min.
- Incubate at 90 °C for 30 min.** Vortex occasionally during incubation.
- Add 200 µl FATG2 Buffer to the sample mixture, mix thoroughly by pulse-vortexing.
- Add 200 µl ethanol (96-100%) to the sample mixture. Mix thoroughly by pulse-vortexing.
- Place a TG Micro Column in a Collection Tube. Transfer the mixture carefully to the TG Micro Column. Centrifuge at full speed (~18,000 x g) for 1 min **then place the TG Micro Column to a new Collection Tube.**
- Add 400 µl W1 Buffer to the TG Micro Column. Centrifuge at full speed for 1 min then discard flow-through.
 ---Make sure that ethanol has been added into W1 Buffer when first open.
- Add 650 µl Wash Buffer to the TG Micro Column. Centrifuge at full speed for 1 min then discard flow-through.
 ---Make sure that ethanol has been added into Wash Buffer when first open.
- Centrifuge at full speed for an additional 3 min to dry the column.
 --- **Important Step! This step will remove the residual liquid.**
- Add 12 µl of preheated Elution Buffer or ddH₂O (pH 7.5-9.0) to the membrane of the TG Micro Column. Stand the TG Micro Column for 3 min.
 --- **Important Step!** For effective elution, make sure that the elution solution is dispensed onto the membrane center and is absorbed completely.
- Centrifuge at full speed for 2 min to elute DNA.

Brief procedure:

