FavorPrep™ MicroElute PCR Clean Up Kit

(For Research Use Only)

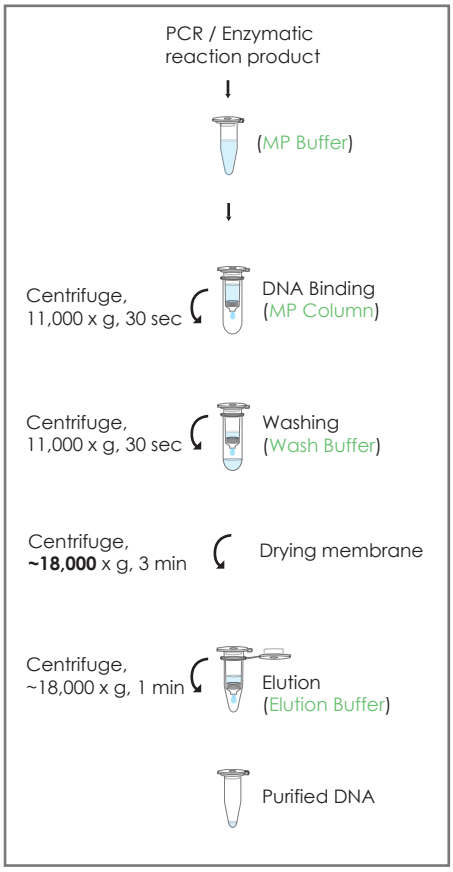
- For purification of PCR products or reaction mixtures
  (concentration and desalination of reaction mixtures)

Kit Contents:

Cat. No:	FAMPK 000B (4 preps_sample)	FAMPK 001B (50 preps)	FAMPK 001-1B (100 preps)
MP Buffer	3 ml	30 ml	60 ml
Wash Buffer (concentrate)[a]	1 ml	12.5 ml	22.5 ml
Elution Buffer	0.5 ml	5 ml	5 ml
MP Columns *	4 pcs	10 x 5 pcs	10 x 10 pcs
Collection Tubes	4 pcs	50 pcs	100 pcs
User Manual	1	1	1
Preparation of Wash Buffer by adding ethanol (96 ~ 100%)			
Ethanol volume for Wash Buffer[a]	4 ml	50 ml	90 ml

*Store the MF Columns to 4 ~ 8 °C upon receipt.

Brief procedure:



Specification:

Principle: spin column (silica matrix)
DNA Binding capacity of spin column: 5 µg
Sample size: up to 100 µl of reaction solution
DNA size: 65 bp ~ 10 kbp
Recovery: 80% ~ 90% for PCR clean-up
Operation time: 15 min
MinimumElution volume: 10 µl

Important Notes:

1. Buffer provided in this kit contain irritants. Wear gloves and lab coat when handling these buffers.
2. Add the required volume of ethanol (96~100%) to Wash Buffer before use.
3. Centrifugation steps are done by a microcentrifuge capable of the speed at 11,000 ~18,000 x g.

Protocol:

Please Read Important Notes Before Starting Following Steps.

1. Transfer 10 ~100 µl of PCR (or enzymatic product) and 5 volumes of MP Buffer to a 1.5 ml microcentrifuge tube (not provided). Mix by vortexing.
- For example, Add 250 µl of MP Buffer to 50 µl of PCR product.

Note For concentration and purification of DNA from enzymatic reactions, the limits of sample volume and DNA amount are 100 µl and 5 µg.

2. Place a MP Column to a Collection Tube. And transfer the sample mixture to the MP Column.

3. Centrifuge for 1 min then discard the flow-through.

4. Add 600 µl of Wash Buffer (ethanol added) to the MP Column. Centrifuge for 1 min then discard the flow-through.
- Make sure that ethanol (96~100%) has been added to Wash Buffer when first open.

5. Centrifuge for an additional 3 min to dry the MP column.
Important step! The residual liquid should be removed completely by this step.

6. Place the MP Column into a new 1.5 ml microcentrifuge tube (not provided).

7. Add ≥ 10 µl of Elution Buffer or ddH$_2$O (pH 7.0~8.5) to the membrane center of the MP Column. Stand the MP Column for 2 min.
- **Important step!** For effective elution, make sure that the elution solution is dispensed onto the membrane center and is absorbed completely.
- **Important :** Do not elute the DNA using less than suggested volume (10 µl). It will lower the final yield.

8. Centrifuge for 1 min to elute DNA.
- The average eluate volume is 9 µl from 10 µl elution buffer volume.

Troubleshooting

Problems	Possible reasons	Solutions
Low or none recovery of DNA fragment	Apply more than 100 µl of PCR product	If PCR product is more than 100 µl, separate it into multiple tubes.
	Elution of DNA fragment is not efficient	Make sure the pH of Elution Buffer or ddH_2O is between 7.0- 8.5.
		Make sure that the elution solution has been completely absorbed by the column membrane before centrifugation.
	The size of DNA fragment is larger than 5 Kb	Preheat the elution solution to 60 °C before use.
Poor performance in the downstream applications	Salt residue remains in eluted DNA	Wash the column twice with Wash Buffer.
	Ethanol residue remains in eluted DNA	Do discard the flow-through after washing with Wash Buffer and centrifuge for an additional 3 min.