FavorPrep™ MicroElute PCR Clean Up Kit

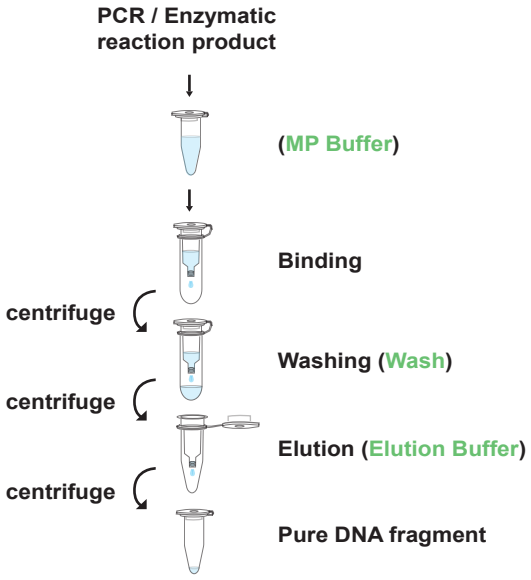
FAVORGEN BIOTECH CORP.

Cat.: FAMPK001, 50 Preps
FAMPK001-1, 200 Preps
(For Research Use Only) v.0906

Kit Contents:

	FAMPK001 (50 preps)	FAMPK001-1 (200 preps)
MP Buffer	30 ml	115 ml
Wash Buffer (concentrated)	12.5 ml*	50 ml**
Elution Buffer	5 ml	5 ml
MP Column	50 pcs	200 pcs
Collection Tube	50 pcs	200 pcs

*Add 50 ml ethanol (96-100%) to Wash Buffer when first open.
**Add 200 ml ethanol (96-100%) to Wash Buffer when first open.



Specification:

Sampling: PCR product up to 100 µl

Recovery : 80-90%.

Binding capacity : 5 µg

Very small elution volumn : 10 µl

Handling Time:10 min for PCR Purification.

Important Notes:

1. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffer.
2. Add required volume of ethanol (96~100%) to Wash Buffer as bottle indicated when first open.
3. For concentraction or purification of DNA fragments from enzymatic reactions, the maximum sample volume is 100 µl and the maximum amount of DNA fragments is 5 µg.
4. All centrifuge steps are done at full speed (14,000 rpm or 10,000 x g) in a microcentrifuge.

Protocol:

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

Note For concentraction or purification of DNA fragments from enzymatic reactions, the maximum sample volume is 100 µl and the maximum amount of DNA fragments is 5 µg.

2. **Place a MP Column to a Collection Tube and transfer the sample mixture to MP Column.**
3. **Centrifuge for1 min then discard the flow-through.**
4. **Add 600 µl of Wash Buffer (ethanol added) to MP Column. Centrifuge for 1 min then discard the flow-through.**
   - Make sure that ethanol (96~100%) has been added into Wash Buffer when first open.
5. **Centrifuge for an additional 3 min to dry MP column.**

Important step! This step will avoid the residual liquid to inhibit subsequent enzymatic reactions.

6. **Place MP Column into a new 1.5 ml microcentrifuge tube (not provided).**
7. **Add 10 ~ 25 µl of Elution Buffer or ddH2O (pH 7.0~8.5) to the membrane center of MP Column. Stand 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.

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 centrifuga-tion.
	The size of DNA fragment is larger than 5 Kb	Preheat the elution solution to 60 °C before use.
Poor perfor-mance 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.