

## Kit Contents:

	FAPCK001	FAPCK001-1
FAPC Buffer	30 ml	125 ml
Wash Buffer* (concentrated)	12.5 ml	45 ml
Elution Buffer	5 ml	20 ml
FAPC Column	50 pcs	200 pcs
Collection Tube	50 pcs	200 pcs
Elution Tube	50 pcs	200 pcs

\*For FAPCK001, add 50 ml ethanol (96-100%) to Wash Buffer when first open. For FAPCK001-1, add 180 ml ethanol (96-100%) to Wash Buffer when first open.

## Specification:

Sampling: up to 100 µl PCR product  
 or enzymatic reaction product

Recovery : 80-95%.

Volume of eluate : 40 µl

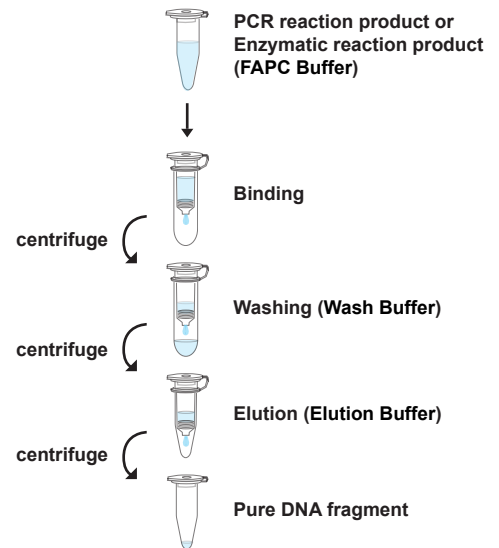
Handling Time: Within 15 min

## Important Notes:

1. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffer.
2. Add ethanol (96~100%) to Wash Buffer when first open.
3. All centrifuge steps are done at full speed (14,000 rpm or 10,000 x g) in a microcentrifuge.

## General Protocol:

1. Transfer 10~100µl of PCR product (excluding oil) and add 5 volumes of FAPC Buffer to a 1.5 ml microcentrifuge tube (not provided) then mix well by vortexing.  
 -For example, Add 250 µl of FAPC Buffer to 50 µl of PCR product.  
 -The maximum volume of PCR product is 100ul (excluding oil).
2. Place a FAPC Column into a Collection Tube and transfer the sample mixture to FAPC Column.
3. Centrifuge for 1 min then discard the flow-through.
4. Add 750 µl of Wash Buffer (ethanol added) to FAPC 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 the column.  
 -Important step! This step will avoid the residual liquid to inhibit subsequent enzymatic reactions.
6. Place FAPC Column into a Elution Tube (provided).
7. Add 40 µl of Elution Buffer or ddH<sub>2</sub>O (pH 7.0~8.5) to the membrane center of FAPC Column.  
 Stand FAPC Column for 2 minutes.  
 -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 the DNA.



## 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 <sub>2</sub> O 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.