FavorPrep™ Gel Purification Mini Kit

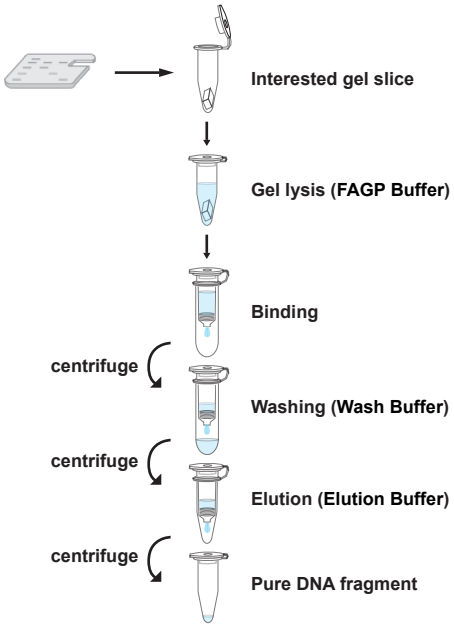
(For Research Use Only)

Cat.: FAGPK001, 50 Preps
FAGPK001-1, 200 Preps

Kit Contents:

	FAGPK001	FAGPK001-1
FAGP Buffer	50 ml	200 ml
Wash Buffer* (concentrated)	15 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 60 ml ethanol (96-100%) to Wash Buffer when first open.For FAPCK001, Add 180 ml ethanol (96-100%) to Wash Buffer when first open.



Specification:

Sampling: up to 200 mg agarose gel
Recovery : 70-85%.
Volume of eluate : 40 µl
Handling Time: within 25 min

Important Notes:

1. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffer.
2. Add 4 ml ethanol (96~100%) to Wash Buffer when first open.
3. Excise the extra agarose gel to minimize the size of the gel (up to 200 mg).

Genernal Protocol:

Please Read Important Notes Before Starting The Following steps.

HINT: Prepare a 55 °C dry bath or water bath for step 4.

1. Excise the agarose gel containing relevant DNA fragments with a clean scalpel.
   -Remove the extra agarose gel to minimize the size of the gel slice.

2. Transfer up to 200 mg of the gel slice into a 1.5 ml microcentrifuge tube. (not provided)
   -The maximum volume of the gel slice is 200mg.

3. Add 3 volume of FAGP Buffer to the sample and mix by vortexing.
   -For example, Add 300 µl of FAGP Buffer to 100 mg of gel.
   -***For >2% agarose gels, Add 6 volume of FAGP Buffer.***

4. Incubate at 55°C for 10~15 min and vortex the tube every 3 min until the gel slice dissolved completely.
   -During incubation, interval vortex can accelerate the gel dissolved.
   -Make sure that the gel slice has been dissolved completely before proceed the next step.

5. Cool down the sample mixture and place a FAGP column into a Collection Tube. Transfer to FAGP Column. Centrifuge *at 6,000 rpm* for 1 min then discard the flow-through.
   -If the sample mixture is more than 850 µl, repeat the step 5 for the rest sample mixture.

6. Add 750 µl of Wash Buffer (ethanol added) to FAGP Column. Centrifuge *at 6,000 rpm* for 1 min then discard the flow-through.
   -Make sure that ethanol (96~100%) has been added into Wash Buffer when first open.

7. Centrifuge at *14,000 rpm* for an additional 3 min to dry the column.

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

8. Place FAGP Column into a Elution Tube (provided).

9. Add 40 µl of Elution Buffer or ddH_2O (pH7.0~8.5) to the membrane center of FAGP Column. Stand FAGP 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.

10. Centrifuge at 14,000 rpm for 1 min to elute the DNA.

Troubleshooting

Problems	Possible reasons	Solutions
The gel slice is hard to dissolve	Agarose gel of high percentage (> 2 %) is used	Add 6 volumes of FAGP Buffer to 1 volume of the gel slice.
	The size of the gel slice is too large	If the gel slice is more than 200 mg, separate it into multiple tubes.
Low or none recovery of DNA fragment	The column is loaded with too much agarose gel	The maximum volume of the gel slice is 200 mg per column.
	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 membrane before centrifuge.
	The size of DNA fragment is larger than 5 Kb	Preheat the elution solution to 60 °C before use.
Eluted DNA contains non-specific DNA fragment	Contaminated scalpel	Using a new or clean scalpel.
	DNA fragment is dena-tured	Incubate eluted DNA at 95 °C for 2 min, then cool down slowly to reanneal denatured DNA.
Poor perfor-mance in the downstream applications	Salt residue remains in eluted DNA fragment	Wash the column twice with Wash Buffer.
	Ethanol residue remains in eluted DNA fragment	Do discard the flow-through after washing with Wash Buffer and centrifuge for an additional 3 min.