ALPHAGEN® BIOTECH CORP.

α⁺ Solution™ GEL/ PCR Purification Kit

Kit Contents:

Cat. No:	APGCK 004 (4 preps_sample)	APGCK 050 (50 preps)	APGCK 100 (100 preps)	APGCK 300 (300 preps)
DF Buffer	1.5 ml x 2	40 ml	80 ml	240 ml
Wash Buffer (concentrate)[a]	1.0 ml	15 ml	25 ml	50 ml
Elution Buffer	0.5 ml	5 ml	6 ml	30 ml
DF Column	4 pcs	50 pcs	100 pcs	300 pcs
Collection Tube	4 pcs	50 pcs	100 pcs	300 pcs
User Manual	1	1	1	1
Preparation of Wash Buffer by adding ethanol (96 ~ 100%)				
Ethanol volume for Wash Buffer[a]	4 ml	60 ml	100 ml	200 ml

Specification:

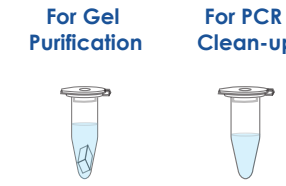
Principle:	spin column (silica matrix)
DNA Binding capacity of spin column:	20 μg
Sample size:	up to 300 mg of agarose gel up to 100 μl of reaction solution
DNA size:	65 bp ~ 10 kbp
Recovery:	70% ~ 85% for Gel extraction 90% ~ 95% for PCR clean-up
Operation time:	10 ~ 20 min
Elution volume:	40 μl

Important Notes:

1. Buffer provided in this kit contain irritants. Wear gloves and lab coat when handling these buffer.
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 ~1,8000 x g.

Brief procedure:

Sample prepare



For Gel Purificatio:
Add **300 mg** of the gel slice
Add **500 μl of DF Buffer**
Incubate at **55 °C for 5 ~10 minutes**

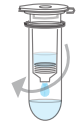
For PCR Claen-up:
Add **100 μl** of PCR product (excluding oil)
Add **5 volumes of DF Buffer**

Transfer the sample mixture to the DF Column

Binding

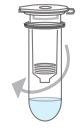
Centrifuge at 11,000 x g for 30 seconds

Wash



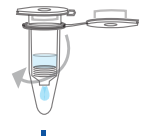
Add **750 μl of Wash Buffer**
Centrifuge at 11,000 x g for 30 seconds

Dry



Centrifuge(~18,000 x g) for 3 min

Elution



Add **40μl of Elution Buffer** or ddH_2O Stand the column for 1 mins Centrifuge(~18,000 x g) for 1 mins

Pure DNA

Gel Extraction Protocol: For extraction of DNA fragments from agarose gel

Please Read Important Notes Before Starting Following Steps.

STEP	PROCEDURE
1 Gel Dissociaton	●Excise the agarose gel with a clean scalpel.Transfer up to 300 mg of the gel slice into a microcentrifuge tube.(not provided). ●Add **500 µl of DF Buffer** to the sample and mix by vortexing. ●Incubate at 55 °C for 5 ~10 minutes and vortex the tube every 2 ~ 3 minutes until the gel slice dissolved completely. ●Cool down the sample mixture to room temperature. And place a DF Column into a Collection Tube.
2 DNA Binding	Transfer 800 µl of the sample mixture to the DF Column. Centrifuge at 11,000 x g for 30 seconds, then discard the flow-through.
3 Wash	Add **750 µl of Wash Buffer** (ethanol added) to the DF Column. Centrifuge at 11,000 x g for 30 seconds, then discard the flow-through.
4 Dry Column	Centrifuge again at full speed (~ 18,000 x g) for an additional 3 minutes to dry the column matrix.
5 Elution	●Place the DF Column to a new microcentrifuge tube (not provided). ●Add **40 µl of Elution Buffer** or ddH_2O to the membrane center of the DF Column. ●Stand the DF Column for 1 min. ●Centrifuge at full speed (~ 18,000 x g) for 1 min to elute the DNA.

PCR Clean-Up Protocol: For purification of PCR products or reaction mixtures

Please Read Important Notes Before Starting Following Steps

STEP	PROCEDURE
1 Sample prepare	Transfer up to 100 µl of PCR product (excluding oil) to a microcentrifuge tube (not provided) add 5 volumes of **DF Buffer**, mix well by vortexing. Place a DF column into a Collection Tube.
2 DNA Binding	Transfer the sample mixture to the DF Column. Centrifuge at 11,000 x g for 30 seconds, then discard the flow-through.
3 Wash	Add **750 µl of Wash Buffer (ethanol added)** to the DF Column. Centrifuge at 11,000 x g for 30 seconds, then discard the flow-through.
4 Dry Column	Centrifuge again at full speed (~18,000 x g) for an additional 3 minutes to dry the column matrix.
5 Elution	●Place the DF Column to a new microcentrifuge tube (not provided). ●Add **40 µl of Elution Buffer** or ddH_2O to the membrane center of the DF Column. ●Stand the DF Column for 1 min. ●Centrifuge at full speed (~18,000 x g) for 1 min to elute the DNA.

Scan
to discover !

https://www.alphagen.bio
Scan to ALPHAGEN troubleshooting