A&A BIOTECHNOLOGY
innovating life science

Gel-Out AX

Increased efficiency kit for DNA extraction from low melting point agarose.
Procedure with DNA precipitation.
version 0617

50 isolations

Cat. # 024-50

The binding capacity of the purification column is 10 µg of DNA.
DNA fragments range - from 100 bp to 20 000 bp.

For R&D use only.

Kit Contents

Component	50 isolations	Store at
Spin 10 AX columns	50 pcs	+4 to +8 ℃
2 ml tubes	50 pcs	Room Temp.
LPD agarose melting solution	30 ml	Room Temp.
K2 wash solution	55 ml	Room Temp.
K4 elution solution	30 ml	Room Temp.
PM precipitation mix	25 ml	Room Temp.
TE buffer	5 ml	Room Temp.

Equipment and materials necessary for DNA purification that are not included in the kit

1. DNA sample after enzymatic reactions
2. Sterile water (nuclease free, DEPC treated) (cat. # 003-075, 003-25, 003-500) (option)
3. 70% ethanol
4. Centrifuge
5. Heatblock or incubator set to 60 ℃

NOTE:
Before you start working, we recommend cleaning the work surface using LabZAP™ product (cat. # 040-500)

A&A Biotechnology provides one year guarantee on this kit
The company does not guarantee correct performance of this kit in the event of:
• not adhering to the supplied protocol
• not recommended use of equipment and materials
• the use of other reagents than recommended or which are not a component of the kit
• the use of expired or improperly stored reagents and columns

Isolation protocol

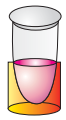
1. Cut the agarose slices (up to 200 µg) containing DNA.
   Transfer agarose slices to Eppendorf tubes (not included).

   Agarose gel electrophoresis can be performed in the presence of either TAE or TBE buffer.

2. Add 500 µl of LPD agarose melting solution.

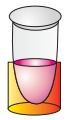
3. Mix the samples and incubate at 60 ℃ until complete dissolution of agarose (~5–10 min).

   During incubation mix the samples from time to time by inverting the tubes.



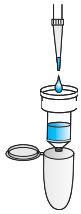
60 °C

4. After complete agarose dissolution, incubate the samples for 3 min at room temp.

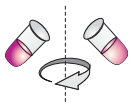


room temp.

5. Apply the mixture onto the Spin 10 AX columns.



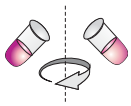
6. Centrifuge for 30 s at 5000 RPM.



7. Remove the Spin 10 AX columns from the tubes.
   Discard the filtrates and re-attach the Spin 10 AX columns to the same tubes.

8. Add 500 µl of K2 wash solution.

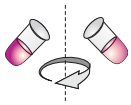
9. Centrifuge for 30 s at 5000 RPM.



10. Remove the Spin 10 AX columns from the tubes.
Discard the filtrates and re-attach the Spin 10 AX columns to the same tubes.

11. Add 500 µl of K2 wash solution.

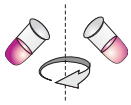
12. Centrifuge for 30 s at 5000 RPM.



13. Transfer the dry Spin 10 AX columns to the new 2 ml tubes (included).

14. Add 250 µl of K4 elution solution.
Incubate for 2 min at room temp.

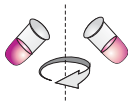
15. Centrifuge for 30 s at 5000 RPM.



16. Add 250 µl of K4 elution solution.

Incubate for 2 min at room temp.

17. Centrifuge for 30 s at 5000 RPM.

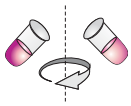


18. Remove the Spin 10 AX columns.

PM precipitation mix contains a precipitation enhancer and it should be intensively mixed before use by few times vigorous hand shaking.

Add 400 µl of PM precipitation mix to the eluted DNA.

19. Mix the samples by inverting the tubes a few times and centrifuge for 10 min at 12 000 RPM.

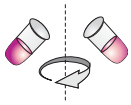


20. Carefully discard supernatants.

The light-blue DNA pellet should be visible at the bottom of the precipitation tube.

21. Add 500 µl of 70% ethanol (not included).

22. Mix the samples and centrifuge for 3 min at 12 000 RPM.



23. Carefully discard supernatants and air dry the DNA pellets for 5 min at room temp. in the up-side-down position.

If there are any leftovers (small droplets) of alcohol on the tube walls they should be removed with a sterile cotton buds.

24. Dried DNA pellet can be dissolved in desired volume of TE buffer (included), sterile water (not included) or Tris buffer (10 mM, pH 8.0) (not included).

The blue color of DNA precipitate enables visual confirmation of the DNA dissolution process.

25. Store the purified DNA at +4 to +8 °C until later use.

Related products

• DNA fragments purification after enzymatic reactions

Product	Quantity	Cat. #
Clean-Up	50 isolations	021-50
	250 isolations	021-250
Clean-Up Concentator	50 isolations	021-50C
	250 isolations	021-250C
Clean-Up 96-well	192 isolations	021-192
Clean-Up Maxi	10 isolations	028-10

• DNA extraction from agarose gel

Product	Quantity	Cat. #
Gel-Out	50 isolations	023-50
	250 isolations	023-250
Gel-Out Concentator	50 isolations	023-50C
	250 isolations	023-250C
Gel-Out AX	50 isolations	024-50

• Terminators removal kits after sequencing reactions

Product	Quantity	Cat. #
ExTerminator	50 isolations	444-50
	250 isolations	444-250
ExTerminator 96-well	192 isolations	444-192

• Rapid, enzymatic purification of PCR products

Product	Quantity	Cat. #
EPPiC	100 reactions	1021-100
	500 reactions	1021-500

Safety information

WARNING
LPD agarose melting solution
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

DANGER
K2 wash solution
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P261 Avoid breathing vapours.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

DANGER
K4 elution solution
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P261 Avoid breathing vapours.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

DANGER
PM precipitation mixture
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P261 Avoid breathing vapours.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Notes: