Gentaur Europe BVBA Voortstraat 49, 1910 Kampenhout BELGIUM
Tel 0032 16 58 90 45 info@gentaur.com

Agarose Gel DNA Extraction Kit

(Catalog# K1441-100; 100 tests; Storage at Multiple Temperatures)

I. Introduction:

This kit provides a simple, rapid and efficient method for the recovery and purification of DNA directly from Agarose gel (100 bp to 50 kb) with typical recovery efficiency up to 85%. The resulting product can be directly used for sequencing, restriction digestion, or PCR and other downstream experiments. In addition, the kit can be used to concentrate DNA.

The kit will work with a 96 well round bottom plates if a special magnetic frame is used. The kit can also be used with a variety of automatic nucleic acid extraction instruments and workstations.

II. Applications:

- Purification of DNA directly from Agarose gel. Purified DNA can be used for sequencing, restriction digestion, or PCR and other downstream experiments.

III. Sample Type:

- Agarose gel (100 bp to 50 kb)

IV. Kit Contents:

Component	K1441-100	Part Number
Magnetic Beads	5.5 ml	K1441-100-1
Gel Solvent Buffer	34 ml	K1441-100-2
Wash Solution*	38 ml	K1441-100-3
Elution Buffer	4 ml	K1441-100-4

Add 25 mL of Isopropanol to the Wash solution (K1441-100-3) before use.

V. User Supplied Reagents and Equipment:

- Isopropanol (ACS grade).
- RNAse (100 mg/mL) solution to remove RNA.
- 80% Ethanol in water.
- Magnet or other magnetic racks compatible with vials used.

VI. Storage Conditions:

Magnetic beads should be stored at 2-8°C but other kit reagents need to be stored at room temperature. Lysis solution may turn cloudy if stored in the cold room. To clear it up place the bottle in a water bath at 37°C.

VII. Assay Protocol:

1. *Sample preparation:* Add 500 µl of gel solvent buffer and a gel slice of up to 400 mg into a clean Eppendorf tube. For a gel slice larger than 400 mg, add at least 800 µl of gel solvent buffer. Incubate at 65°C for 10 min or until the gel is completely dissolved. Vortex the tube periodically to ensure complete dissolving.
2. Transfer all content to an Eppendorf tube and then add 50 µl of magnetic beads, mix well and incubate 3-5 min at RT. Put Eppendorf tube onto the magnet rack for 20 seconds. *NOTE: The estimated recovery of DNA is about 2 µg per 50 µl of beads.*
3. Remove supernatant by holding the magnet rack upside down or by pipetting.
4. Wash the beads with 500 µl of Wash Solution. Make sure the beads get completely resuspended by vortexing and then repeat step 3.
5. Wash the beads with 500 µl of 80% ethanol.
6. Make sure the beads get completely resuspended by vortexing and then repeat step 3.
7. Dry the beads at 55°C for 8 min leaving the tube open. Do not over-dry the beads.
8. Elute the DNA from beads with 35 µl of elution buffer, incubate for at least 2 min and then vortex at full speed for 1 min. Alternatively, incubation at 60°C for 2 min may improve the recovery for DNA larger than 3 kb.
9. Remove beads by using magnet rack, pipette DNA out and transfer to a clean tube.
10. Store purified DNA at -20°C for long-term storage.

VIII. Related Products:

- Blood genomic DNA extraction and purification kit (# K1443)
- Cell & tissue genomic DNA extraction and purification kit (# K1442)
- Plasmid DNA extraction and purification kit (# K1445)
- PCR DNA extraction and purification kit (# K1444)

FOR RESEARCH USE ONLY! Not to be used on humans.