

# AllPure Fast Gel Extraction Kit

Cat. No. ABTGNA006

**Storage:** at room temperature (15-25°C) for one year

## Description

AllPure Fast Gel Extraction Kit is designed for rapid purification and recovery of DNA from TAE or TBE agarose gel. DNA is specifically bound to a silica-based column. The purified DNA is suitable for a variety of molecular biology applications, including restriction enzyme digestion, ligation, cloning, and DNA sequencing.

## Highlights

- DNA fragments size of 100 bp to 10 kb.
- Colored GSB solution (yellow) to monitor gel dissolving efficiency.
- Less than 20 minutes procedures.

## Kit Contents

Component	50 rxns	200 rxns
Gel Solubilization Buffer (GSB, Yellow)	30 ml	120 ml
Wash Buffer (WB)	10 ml	2×20 ml
Elution Buffer (EB)	5 ml	10 ml
Gel Spin Columns with Collection Tubes	50 each	200 each

## Procedures

Before starting, add 40 ml of 96-100% ethanol to the 10 ml concentrated Wash Buffer to make the final Wash Buffer; or add 2×80 ml of 96-100% ethanol to the 2×20 ml concentrated Wash Buffer to make the final Wash Buffer.

All centrifugation steps are carried out at room temperature.

1. Excise the DNA fragment from the agarose gel using a razor blade or scalpel. Weigh the gel slice, place the gel slice into a 1.5 ml microcentrifuge tube.
2. Add 3 volume of GSB to 1 volume of gel (100 mg or approximately, ie 100 mg  $\approx$  100  $\mu$ l). Incubate at 55°C for 6-10 minutes until the gel slice has completely dissolved. Mix by vortexing the tube every 2-3 minutes to help to dissolve the gel during the incubation. Once the gel is completely dissolved, watch the color of the solution. The color of solution should be the same as GSB. If not, add some 3 M NaAc (pH 5.2) to the solution. In order to increase the yield of DNA, equal volume of isopropanol can be added to the gel solution (e.g. 100  $\mu$ l isopropanol to 100 mg gel).
3. When the solution temperature falls back to room temperature, transfer the solution to spin column. Incubate for 1 minute at room temperature, then centrifuge at 10,000×g for 1 minute. Discard the flow-through.
4. Add 650  $\mu$ l of WB, Centrifuge at 10,000×g for 1 minute. Discard the flow-through.
5. Centrifuge the empty column at 10,000×g for 1-2 minutes to remove the residual WB.
6. Place the spin column in a clean microcentrifuge tube, add 30-50  $\mu$ l of EB or sterile, distilled water (pH > 7.0) directly to the center of the column matrix (for higher yield, preheat EB or water to 65°C). Incubate the column at room temperature for 1 minute. Centrifuge at 10,000×g for 1 minute to elute the DNA. The purified DNA is ready to use or can be stored at 20°C.

## Notes

- Use freshly prepared electrophoresis buffer for gel electrophoresis.
- Cut the gel into as small pieces as possible. Ensure the gel to be completely dissolved.