EasyPure® Quick Gel Extraction Kit

Cat. No. EG101

Storage: at 15°C-30°C under dry conditions for two years.

Description

EasyPure® Quick Gel Extraction Kit utilizes the guanidinium isothiocyanate method to dissolve gel slices and a silica gel membrane spin column to purify DNA fragments from TAE or TBE agarose gels. DNA purified by the kit can be used for various techniques including digestion, ligation, transformation, and sequencing.

Highlights

- Purification of fragments ranging from 100 bp to 10 kb.
- Gel Solubilization Buffer (GSB,Yellow), color change indicates pH level is appropriate for DNA binding to column.
- Fast purification in less than 20 minutes.

Kit Contents

Component	EG101-01 (50 rxns)	EG101-02 (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	2×100 each

Procedures

Add different volumes of 100% ethanol to the WB buffer before use.

Specification	WB
50 rxns	40 ml
200 rxns	2×80 ml

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 ≈ 100 µl). 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 shound 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 µl isopropanol to 100 mg gel).
3. When the solution temperature falls back to room temperature (High temperatures reduce the DNA-binding capacity of the spin column.) , 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 µl 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 into a clean centrifuge tube, leave the lid open for 1 minute to allow any residual ethanol to evaporate completely. Add 30-50 µl of EB or deionized water (pH > 7.0) to the center of the column. (Preheating the EB or deionized water at 60-70 °C improves elution efficiency.) Keep it still at room temperature for 1 minute.
7. Centrifuge at 10,000 × g for 1 minute to elute the DNA. Store the eluted DNA 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.
- To avoid DNA damage caused by UV exposure, which may affect downstream applications such as cloning or ligation, minimize the duration of UV irradiation.

For research use only, not for clinical diagnosis.

Service telephone +86-10-57815020
Service email custserv@transgenbiotech.com