



Gragen Gel Extraction Kit

Catalog No. : 122131

Introduction

Gragen Gel Extraction Kit offers a method to extract and purify DNA from agarose gel running in TAE or TBE buffers. The kit can recover and purify DNA fragments between 100 bp and 20 kb from agarose gel using spin columns. The extracted DNA can be used for ligations, PCR, sequencing, restriction digestion, and so on.

Components

Catalog No.	Components	50 T	Storage
122132	Gel Solubilization Buffer (GB1)	30ml	15-25°C
122133	Wash Buffer (WB2)	10ml	15-25°C
122134	Elution Buffer (EB3)	5ml	15-25°C
122135	Spin columns	50 sets	15-25°C

Protocol

*Add 40 ml Ethanol to 10 ml Wash Buffer WB2 (50T) before use.

1. Excise the gel slice containing the DNA band with a clean, sharp blade, and remove extra agarose. Weigh the gel slice in a clean 1.5 ml microcentrifuge tube.
2. Add 3 volumes of yellow Gel Solubilization Buffer (GB1) to 1 volume of gel (i.e., 300 μ l for each 100 mg of gel). Incubate at 55-75°C for 10 min or until the gel has completely melted. Mix by shaking or vortexing the tube for 2-3 minutes. If the color of the Gel Solubilization Buffer mixture changes, add 3M sodium acetate (pH 5.2) drop by drop to bring the pH down. After this adjustment, the color of the mixture should be yellow. (In order to increase DNA yield, please add 1 volume of isopropanol to 1 volume of gel, and mix.)
3. Transfer the samples to the spin columns and centrifuge at 10,000 \times g for 1 min at room temperature. Discard the flow-through liquid and place the spin column into the same collection tube.
4. Add 650 μ l of Wash Buffer (WB2) to the spin column and centrifuge at 10,000 \times g for 1 min. Discard the flow-through liquid and replace the spin column back into the same collection tube.
5. Centrifuge the empty spin columns at 12,000 \times g for 1 min to dry the columns.
6. Place the spin column into a clean 1.5 ml microcentrifuge tube. Add 25-50 μ l Elution Buffer(EB3) or water directly onto the center of column membrane and incubate at room temperature for 1 minute.
7. Centrifuge for 1 min at 12,000 \times g to elute DNA. The extracted DNA can be used directly or stored at -20 °C.