EcoSpin Gel Purification Kit

50 rxns

Cat No: EcoGP-50x

Shipping : Ship at ambient temperature.
Storage : Store the Kit between 15°C and 25°C.

General Information

EcoSpin Gel Purification Kit is designed for effective and fast purification of polymerase chain reaction (PCR) products. Using this kit, primer dimers, free nucleotides in the reaction, salts, and Taq polymerase can be easily and effectively removed.

Kit Contents

EcoSpin Binding Buffer	(25 ml)
EcoSpin Wash Buffer*	(8 ml concentrate)
EcoSpin Elution Buffer	(10 ml)
EcoSpin Columns	(50)
EcoSpin Collection Tubes	(50)

*Add 32 ml absolute ethanol

Additional Equipment & Reagents Required

96–100% ethanol
100% isopropanol
Tabletop microcentrifuge achieving >12,000 rpm
1.5 ml, sterile microcentrifuge tubes

Protocol for Gel Purification

Each isolation procedure in the following protocol is described from 100 mg gel containing DNA products. If the weight of gel slice is larger than 100 mg, increase the amount of Binding Buffer (Step 1) proportionally.

1. Load PCR reaction mixture on a 0.8 – 2% agarose gel and run your sample in a 1x TAE or 1x TBE running buffer. Electrophoresis until DNA band of interest is separated from adjacent contaminating fragments

2. Cut desired DNA band from gel using an ethanol-cleaned scalpel or razor blade.

3. Determine the mass of a sterile 1.5 ml microcentrifuge tube and place excised agarose gel slice in it. Measure the gel mass by re-weighting the tube with the excised gel slice.

4. Add 300 µl *EcoSpin* Binding Buffer to each 100 mg agarose gel slice in the microcentrifuge tube.

5. To dissolve agarose gel slice, incubate the suspension for 10 minutes at 55°C. Vortex the tube briefly every 2 – 3 minutes during incubation in order to release the DNA.

6. After the agarose gel slice is completely dissolved, add 150 µl isopropanol for every 100 mg agarose gel slice to the mixture from step 5 and mix well.

7. Insert an *EcoSpin* Column into a Collection Tube and transfer the sample from step 6 to the EcoSpin Column.

8. Centrifuge at maximum speed in a tabletop microcentrifuge 30 seconds at room temperature.

9. Discard the flowthrough and add 700 µl *EcoSpin* Wash Buffer to the EcoSpin Column.

10. Centrifuge at maximum speed in a tabletop microcentrifuge 30 seconds at room temperature.

11. Discard the flowthrough and centrifuge the empty *EcoSpin* Column at maximum speed for additional 1 minute to completely remove any residual wash buffer.

12. Transfer the *EcoSpin* Column to a clean 1.5 mL microcentrifuge tube (not included).

13. Add 30-50 µL of *EcoSpin* Elution Buffer to the center of the *EcoSpin* Column membrane and incubate the column at room temperature for 1 minute.

14. Centrifuge at maximum speed in a tabletop microcentrifuge 30 seconds at room temperature.

15. Discard the *EcoSpin* Column and store the purified DNA at -20°C.

For further information;
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