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Product information

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96-Well Plate PCR Purification Kit (Vacuum Based)

Catalog #: B813652-002 / B813652-005
Size: 2 Plates / 5 Plates
Storage: 18°C ~ 25°C

Description:

The 96-Well Plate PCR Purification Kit (Vacuum Based) provides a simple, efficient and automated high throughput method for PCR Purification purifications. PCR product is selectively adsorbed in silica gel-based EZ-10 columns in the 96 Well Binding Plate and other impurities such as proteins, salts and nucleotides are removed. PCR DNA can be eluted in a small volume of Tris buffer.

NOTE: This kit is used for preparation of up to 10 µg of pure DNA in each well.

Storage:

The kit is stable for 12 months at room temperature. For longer storage, keep all contents in cold place.

Notes:

1. If PCR mixture contains non-specific amplified DNA fragments, PCR product should be purified using agarose gel. In this case, DNA Gel Extraction Kit (BS353) is recommended.
2. This kit is not capable of removing the template DNA or primers with chain length longer than 40-mer.

Applications:

1. Recovery of PCR products from PCR reaction mixture.
2. Recovery of DNA fragments from reaction solutions.

Features:

- **Fast:** Entire procedure takes approximately 45 minutes
- **High quality:** Purified DNA can be used in any downstream applications such as sequencing, transformation, restriction enzymatic digestion, and ligation
- **High yield** (>80%) and **reproducible**
- **Convenient** and **environmentally friendly.** No phenol/chloroform extraction or ethanol precipitation required

Composition:

Components	B813652-002 (2 Plates)	B813652-005 (5 Plates)
Buffer B3(A)	48 ml	2x48 ml
Wash Solution(B)	2x35 ml	4x48 ml
Elution Buffer(C)	12 ml	30 ml
EZ-10 96 Well Binding Plate Vacuum Manifold Fit	2	5
Deep Well Collection Plate	4	10
96 Well Storage Plate	2	5
Sealing Film	2	10
Protocol	1	1

(A) Before use, add 12 ml of 96-100% of Isopropanol to 48 ml of Buffer B3, or 24ml of 96-100% of Isopropanol to 96 ml of Buffer B3. For other volumes of Buffer B3, simply add enough isopropanol to make a 1:4 ratio (volume of added isopropanol: volume of Buffer B3 = 1:4).

(B) Before use, add 140 ml of 96-100% of ethanol to 35 ml of Wash Solution, or 192ml of 96-100% of ethanol to 48 ml of Wash Solution. For other volumes of Wash Solution, simply add enough ethanol to make a 4:1 ratio (volume of added ethanol: volume of Wash Solution = 4:1).

(C) Elution Buffer is 2mM Tris-HCl pH 8.0~8.5. Although TE buffer pH 8.0 or water may be 96 Well PCR Products Purification Kit 4 substituted, the resulting yields may be up to 20% lower..

Vacuum Based Procedures

Reverse transcription reactions should always be conducted in an RNase-free environment.
The use of clean, automatic pipettes designated for PCR and aerosol-resistant barrier tips are recommended.

1. Transfer PCR* reaction mixtures to a Deep Well Collection Plate and add 3 volumes of Buffer B3, seal the Deep Well Collection Plate using a Sealing Film, mix by inverting 5 times.
NOTE: Please ensure isopropanol has been added to Buffer B3 prior.

2. Assemble the Vacuum Manifold: place a Waste Tray in the Base, cover it with the Base Cap, and then place an EZ-10 96 Well Spin Column Plate on top. Transfer the above mixture solutions to the EZ-10 96 Well Spin Column Plate, and let it stand at room temperature for 2 minutes. Apply vacuum until the solution has passed through.

3. Discard the flow-through. Add 500µl of Wash Solution to the EZ-10 96 Well Spin Column Plate. Assemble the Vacuum Manifold as described in Step 2, apply vacuum until buffer has passed through.

4. Repeat wash procedure in step 3 (Optional: Repeat wash step one more time if needed). After Wash Solution has been drawn through the column, apply maximum vacuum for additional 2 minutes to dry the membrane. If necessary, tap dry the bottom nozzle of EZ-10 96 Well Spin Column Plate on paper towel before elution step.

5. For elution, assemble the Vacuum Manifold. This time, place a 96 Well Storage Plate Holder in the Base, and then put the 96 Well Storage Plate on top. Cover with the Base Cap. Place the EZ-10 96 Well Spin Column Plate from step 4 on top securely. Mark the orientation appropriately.

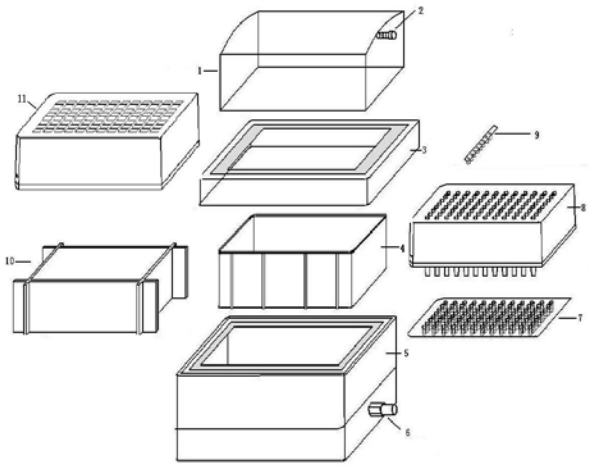

Figure 1. Components of EZ-10 96 Well Spin Column PCR Minipreps Kit

1. Top Cap
2. Release Valve
3. Base Cap
4. Waste Tray
5. Base
6. Vacuum Connector
7. 96 Well Storage Plate
8. 96 Well Filter Plate (blue nozzle) or 96 Well Binding Plate (pink nozzle)
9. 8 Well Strip Vacuum Sealer
10. Block
11. Deep Well Collection Plate

Note: Vacuum Manifold (F505011-0001– including 1- 6, 10) and 8 Well Strip Vacuum Sealer (BP547) are sold separately.

6. To elute DNA, add 30-50 µl Elution Buffer onto the centre of each well of the EZ-10 96 Well Spin Column Plate; incubate at 50°C for 2 minutes. Apply vacuum for 1 minute. Switch off vacuum and ventilate vacuum manifold slowly.

7. Tightly seal the 96 Well Storage Plate. PCR products are ready for use or keep at -20°C for long term.

Troubleshooting

Low DNA yield:

a) DNA less than 100bp or greater than 30kb may lead to a low recovery of DNA. Prolong the standing time after adding mixture to the spin column.

b) It is extremely important to add the Elution Buffer to the center of the column. Pre-warming the Elution Buffer to 80°C or after adding the Elution Buffer to the column, incubate the column at 55°CC to 60°C for 3-5 minutes.

c) Make sure Binding Buffer I does not have anprecipitation, and ethanol have been added to Wash Solution before use.