



## MagPure PCR Clean-up Beads

Catalog Number: D103-1, D103-2

Table 1. Kit Components and Storage

Product Number	D103-1	D103-2	Storage	Stability
MagPure PCR Clean-up Beads	5 mL	50 mL	2-8 °C	The product is stable for one year when stored as directed.

### Product Description

MagPure PCR Clean-up Beads allow rapid and reliable isolation DNA from PCR and other enzymatic reactions with high yield. The system combines our proprietary DNA extraction chemistries with the reversible nucleic acid-binding properties of magnetic beads that selectively bind PCR amplicons 100 bp and larger and eliminate excess nucleotides, primers, and nonspecific products such as primer dimers. Purified DNA can be used in T-A ligations, sequencing, restriction enzyme digestion, and various other labeling reactions.

### Features

- ❖ Rapid – Purification of PCR products in less than 10 minutes.
- ❖ Safe – No Phenol/chloroform extractions.
- ❖ High-quality – DNA is suitable for a variety of downstream applications.

### Purification Protocol

1. Centrifuge to collect the PCR product to the bottom of the tube. Determine the volume of your PCR reaction.
2. Add 2 volumes MagPure PCR Clean-up Beads.  
**Note:** MagPure PCR Clean-up Beads need be completely resuspended before use.
3. Vortex to mix thoroughly. Let sit at room temperature for 5 minutes.
4. Transfer the tube to a magnetic rack for an additional 2 minutes or until beads pellet and supernatant is cleared. With the tube on the magnetic rack remove the supernatant and discard.
5. Leave the tube on the magnet. Add 200  $\mu$ L 70% ethanol to the tube. Let sit at room temperature for 1 minute. It is not necessary to resuspend the magnetic beads. Aspirate and discard the cleared supernatant. Do not disturb the magnetic beads.
6. Repeat Step 5 for a second 70% ethanol wash step.
7. Leave the tube on the magnetic rack, open the cap and air dry the beads at RT for 10-15 min. Remove any residual liquid with a pipettor.  
**Note:** This step is critical for removing of trace ethanol that may interfere with downstream applications.
8. Add 30-50  $\mu$ L of 10 mM Tris buffer or TE buffer (pH 8.0) to the tube. Resuspend the beads by vortexing for 1 min, and let sit at RT for 2-3 min.
9. Replace the tube on the magnetic rack for 2 minutes or until beads pellet. Transfer the cleared supernatant to a clean tube.
10. Store the DNA at -20°C.

## Troubleshooting

Problem	Possible cause and suggestions
Low yield	<ul style="list-style-type: none"><li>• Low PCR product yield: Increase the number amplification cycles for PCR.</li><li>• Smaller PCR product size: Small PCR fragments normally give lower yield.</li><li>• Particle loss during the procedure: Increase magnetization time. Aspirate slowly.</li><li>• DNA remains bound to beads: Increase elution volume.</li><li>• Incomplete resuspension of the beads during elution: Vortex or pipet up and down to fully resuspend the beads.</li></ul>
Poor performance in downstream applications	<ul style="list-style-type: none"><li>• Salt contamination: Remove any residual liquid with a pipettor after each wash step.</li><li>• Ethanol contamination: Ensure the beads are completely dried before elution.</li></ul>