AMD Biotech Inc.
Advanced Molecular Detection

1860 Montreal Road
Tucker, GA. 30084 USA

Auto-Mag® PCR-Pure

Cat # AMD-S002 Version 2.0

Basic Protocol for PCR /DNA clean-up

Materials and Equipment to be supplied by User

- 100 % Ethanol.
- Elution Buffer (diH_2O, 10mM Tris-HCl pH 8.0 or TE buffer).
- For 96 well format: 96 well cycling plate
- ~1.5 ml Nuclease free tubes.
- Appropriate magnetic separation device compatible with 96-well PCR plate or 1.5 ml tubes.
- Well calibrated pipettor and disposable pipette tips.

Before Starting

- Prepare fresh 80% Ethanol (Prepare from absolute ethanol. Do not use denatured alcohol).
- Bring the Auto-Mag® PCR-Pure to room temperature for at least 30 min before use.
- Suspension Auto-Mag® PCR-Pure by vortexing.

Procedure

1. Completely float the Auto-Mag® PCR-Pure reagent until it appears homogeneous in color.

2. Add the appropriate volume of Auto-Mag® PCR-Pure reagent into the reaction vessels containing 10-100µl PCR/DNA sample according to the instructions in the table below.

Table 1: Some common sample volumes and suggested Auto-Mag® PCR-Pure volumes

Sample Volume (µl)	Auto-Mag® PCR-Pure Volume (µl)*
10	18
20	36
25	45
50	90
100	180

** Formula used to calculate the volume of Auto-Mag® PCR-Pure reagent needed for reaction: Auto-Mag® PCR-Pure reagent volume per reaction = 1.8 X sample volume.*

3. Mix thoroughly the Auto-Mag® PCR-Pure reagent and PCR sample by pipetting up and down 10 times. Incubate the mixture for 5 minutes at room temperature.

4. Place the sample reaction vessels on the 96-well, or appropriate magnetic separation device and allow the magnetic beads to settle on the magnet for 5 minutes or until the supernatant turns completely clear. Carefully remove and discard the supernatant by pipetting.

Note: Do not disturb the attracted magnetic beads while aspirating the supernatant.

5. Keep the sample reaction vessels on the magnet and add 200µl of 80% ethanol to each well and incubate for 30 seconds at room temperature. Carefully remove and discard the supernatant by pipetting.

Note: Do not disturb the attracted magnetic beads while aspirating the supernatant. Significant bead loss will result in reduced yield.

6. Repeat steps 5 for second 80% ethanol wash.

7. Keep the sample reaction vessels on the magnetic separation device and air dry the magnetic beads by incubating sample tube at room temperature for 5 minutes.

Note: It is critical to completely remove all traces of alcohol but take caution in not over drying the magnetic beads as this will reduce the yield.

8. Remove the sample reaction vessels from the magnetic separation device. Add 20-50µl of elution buffer (reagent grade water, Tris-HCl pH 8.0 or TE buffer) to each well and mix by pipetting up and down 10 times. Incubate for 5 minutes at room temperature.

9. Place the sample reaction vessels back on the magnetic separation device and wait 2 minutes or until the magnetic beads clear from solution.

10. Transfer the eluate (cleared supernatant) to an appropriate storage vessel and keep at -20°C for long term storage, or for subsequent applications.