Magnetic bead cleaning of PCR products

Forked from a private protocol

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Protocol status: Working

We use this protocol and it's working

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GUIDELINES

Work at post-PCR lab.

You can use PCR tubes/strips or PCR-plates but for easiest work with magnetic beads flat-bottom 96-well microplates are recommended.
1 Calculate the volume needed for the beads:
   \[0.8 \times \text{sample volume} = \]

2 Shake the magnetic bead buffer bottle to fully resuspend magnetic particles.

3 Add Sample.

4 Add beads.

5 Pipette mix 10 times and Incubate at room temperature for 5 minutes.
   \[\text{00:05:00}\]

6 Place the reaction plate onto a Magnet Plate for 2 minutes to separate beads from solution.
   (Keep on the magnet plate until step 11).
   \[\text{00:02:00}\]

7 Aspirate the supernatant from the reaction plate and discard.

8 Dispense 200 μL of 70% ethanol and incubate at room temperature for at least 30 seconds.
   Aspirate out the ethanol and discard. You can discard the ethanol by inverting the plate keeping
   the magnetic plate on the bottom of it.
9 Repeat the washing step as above: dispense 200 μL of 70% ethanol and incubate at room temperature for at least 30 seconds. Aspirate out the ethanol and discard. You can discard the ethanol by inverting the plate keeping the magnetic plate on the bottom of it.

10 Remove the remaining ethanol by pipetting.

11 Take the plate off the magnet

12 Dry off the remaining ethanol. To speed up the process, you can place the plate on a warm (30°C) heat block. Drying takes at least 30 minutes. Check that drying was complete before continuing.

13 Add 40 μL of elution buffer, pipette mix 10 times. Make sure the buffer reaches up to the beads!

14 Incubate at room temperature for 2 minutes.

15 Place the reaction plate onto a Magnet Plate for 1 minute to separate beads from solution.

16 Transfer purified product to a new PCR plate or strips.