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Qiagen DNA PowerWater DNeasy Extraction

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Protocol status: Working

We use this protocol and it's working

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Disclaimer

This protocol is mostly taken from the Qiagen power water kit manufacturer details

Abstract

These are instructions for using the Qiagen Power Water Kit for doing Extraction from drinking water samples

Before start

Solution PW1 must be warmed at 55°C for 5–10 minutes to dissolve precipitates.

If Solution PW3 has precipitated, heat at 55°C for 5–10 minutes to dissolve precipitate.

Shake to mix Solution PW4 before use.



- 1 Insert the filter into a 5 ml PowerWater DNA Bead Tube.
- 2 Add 1 ml of Solution PW1 to the PowerWater DNA Bead
- 3 Secure the tube horizontally to a Vortex and tape it extensively
- 4 Vortex at maximum speed for 5 min. Centrifuge the tubes $\leq 4000 \times g$ for 1 min at room temperature
- 5 Transfer the supernatant to a clean 2 ml Collection Tube Draw up the supernatant using a 1 ml pipette tip by placing it down into the beads.
- 6 Centrifuge at $13,000 \times g$ for 1 min at room temperature.
- 7 Avoiding the pellet, transfer the supernatant to a clean 2 ml Collection Tube (provided).
- 8 Add 200 μ l of Solution IRS and vortex briefly to mix. Incubate at 2–8°C for 5 min.
- 9 Centrifuge the tubes at $13,000 \times g$ for 1 min.
- 10 Avoiding the pellet, transfer the supernatant to a clean 2 ml Collection Tube (provided).
- 11 Add 650 μ l of Solution PW3 and vortex briefly to mix.
- 12 Load 650 μ l of supernatant onto an MB Spin Column. Centrifuge at $13,000 \times g$ for 1 min. Discard the flow-through. Repeat until all the supernatant has been processed.
- 13 Place the MB Spin Column Filter into a clean 2 ml Collection Tube.



- 14 Add 650 μ l of Solution PW4 (shake before use). Centrifuge at 13,000 x g for 1 min.
- 15 Discard the flow-through and add 650 μ l of ethanol and centrifuge at 13,000 x g for 1 min.
- 16 Discard the flow-through and centrifuge again at 13,000 x g for 2 min.
- 17 Place the MB Spin Column into a clean 2 ml Collection Tube
- 18 Add 100 μ l of Solution EB to the center of the white filter membrane.
- 19 Centrifuge at 13,000 x g for 1 min. 23. Discard the MB Spin Column. The DNA is now ready for downstream applications.

Protocol references

Qiagen Power Water Kit instructions